

# UNCLASSIFIED

AD NUMBER
AD831939
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Mar 1968. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

AD831939

FOR OFFICIAL USE ONLY



# CONSOLIDATED TRANSLATION SURVEY

Number 123

Through 31 March 1968

CENTRAL INTELLIGENCE AGENCY  
Washington, D.C. 20505

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR MARCH 1968

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests for Copies	iv
USSR	
Economic	1
Political	8
Military	9
Sociological	11
Biographic	11
Eastern Europe	
Economic	12
Political	17
Military	19
Sociological	20
Western Europe	
Economic	21
Political	22
Military	22
Sociological	23
Biographic	23
Africa	
Economic	23
Political	23
Sociological	24
Middle East	
Economic	24
Political	25
Military	25
Geographic	26
Sociological	26
Far East	
Economic	26
Political	27
Military	29
Sociological	29

	<u>Page</u>
Latin America	
Economic	30
Political	30
Military	32
Scientific	
Aeronautics	33
Agriculture	34
Astronomy & Astrophysics	36
Atmospheric Sciences	37
Behavioral & Social Sciences	39
Biological & Medical Sciences	39
Chemistry	58
Earth Sciences & Oceanography	62
Electronics & Electrical Engineering	70
Energy Conversion (Non-Propulsive)	78
Materials	79
Mathematical Sciences	101
Mechanical, Industrial, Civil & Marine Engineering	105
Methods & Equipment	109
Missile Technology	110
Navigation, Communications, Detection & Countermeasures	111
Nuclear Sciences & Technology	112
Physics	113
Propulsion & Fuels	124
Space Technology	125
Miscellaneous	125
Information on Cover-To-Cover Translations	128
Index to Authors	227



## CONSOLIDATED TRANSLATION SURVEY

### PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (\*), and when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

Scientific and Technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

REQUEST FOR COPIES

Request for copies of published projects should be made direct to the designated producing organization.

Addresses of producers to follow:

ACIC - Aeronautical Chart and Information Center  
(see CFSTI)

ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AF

Department of Air Force  
Assistant Chief of Staff, Intelligence  
ATTN: AFCIN-3D  
Washington 25, D. C.

AGI

American Geological Institute  
AGI Translations Office  
2101 Constitution Avenue, NW  
Washington, D. C. 20000

AGU

American Geophysical Union  
1515 Massachusetts Avenue, NW  
Washington, D. C. 20005

AIP

American Institute of Physics  
335 East 45th Street  
New York, New York 10017

ANL - Argonne National Laboratories, Illinois  
(see AEC)

APL/JHU

The Johns Hopkins University  
Applied Physics Laboratory  
8621 Georgia Avenue  
Silver Spring, Maryland 20910

BISI

British Iron and Steel Industry Translation Service  
The Iron and Steel Institute  
4 Grosvenor Gardens  
London, S. W. 1, England

CB

Consultants Bureau Enterprises, Incorporated  
227 West 17th Street  
New York, New York 10011

CFSTI

Clearinghouse for Federal Scientific and  
Technical Information (Formerly Office of  
Technical Services)  
Port Royal and Braddock Roads  
Springfield, Virginia 22151

CTT

Columbia Technical Translations  
5 Vermont Avenue  
White Plains, New York 10600

Derwent Information Service

Derwent Information Service  
Rochdale House, Theobolds Road  
London, W. C. 1, England

DIA

Defense Intelligence Agency  
Washington, D. C. 20301

FP(Inc)

The Faraday Press, Inc.  
84 Fifth Avenue  
New York, New York 10011

FSTC

Defense Documentation Center  
Cameron Station  
Alexandria, Virginia

FTD - Foreign Technology Division (see AF)

HB

Henry Brutcher Technical Translations  
P. O. Box 157  
Altadena, California 91001

HEW - (see NIH)

IEEE

Institute of Electrical and Electronics Engineers  
275 Madison Avenue  
New York, New York 10016

Department of Interior

Department of Interior  
Branch of Foreign Fisheries (Translations)  
Division of International Affairs  
Bureau of Commercial Fisheries  
Room 8015  
Washington, D. C. 20240

IPST

Israel Program of Scientific Translations  
14 Shammai Street  
P. O. Box 7145  
Jerusalem, Israel

JPRS

U. S. Department of Commerce  
Clearinghouse for Federal Scientific and  
Technical Information  
Joint Publications Research Service  
Building Tempo E,  
East Adams Drive, 4th and 6th Streets, SW  
Washington, D. C. 20443

NASA

National Aeronautics and Space Administration  
1512 H Street NW  
Washington, D. C. 20546

NIC

Naval Intelligence Command  
Naval Intelligence Command Headquarters  
NIC-15  
Washington, D. C. 20350

NIH

Circulation Unit  
Readers Services Section  
Library Branch, DRS  
National Institute of Health  
Building 10, Room 5N118  
Bethesda, Maryland 20014

NMS

U. S. Naval Medical School  
National Naval Medical Center  
Bethesda, Maryland 20014

NOO

U. S. Naval Oceanographic Office  
Washington, D. C. 20390

NSRDC

Naval Ship Research and Development Center  
(Code 041)  
Washington, D. C. 20007

NSDIC

Ministry of Defense  
Room 102, Station Square House,  
St. Mary Cray, Orpington, Kent.

ORNL - Oak Ridge National Laboratory (see AEC)

PG

Petroleum Geology  
Box 171  
McLean, Virginia

Plenum Press

Plenum Press, Incorporated  
227 West 17th Street  
New York, New York 10011

Primary Sources

Primary Sources  
11 Bleecker Street  
New York, New York 10012

RSIC - Defense Documentation Center, Redstone  
Scientific Information Center  
(see CFSTI)

USSR

Economic

Agrarian Problem in Iraq, by Sergey Nikolayevich Alitovskiy.

RUSSIAN, per, Agrarnyy Vopros v Sovremenom Irake, 1966, pp 128-173.

\*ACSI J-4234

ID 2204002368

Fifty Years of Development of the Theory of Automatic Control in the USSR, by L. M. Boichuk.  
RUSSIAN, per, Avtomatika, No 5, 1967, pp 6-20.  
\*Dept of Navy/APL/JHU J-1125

Expansion of Automobile Industry Planned, by N.M. Potapov, 8 pp.  
RUSSIAN, per, Avtomobi'lnaya Promyshlennost', No. 12, Moscow, Dec 67, pp. 1-3.  
JPRS 44,360

Experience of the Work of the Rzhev Crane-Building Plant in the New Economic Conditions, by V. Ye. Bodrov, 6 pp.  
RUSSIAN, journal, Byulleten' Tekhniko-Ekonomicheskoy Informatsii, Moscow, No. 11, 1967, pp. 27-29.  
JPRS 44,216

On the Nature and Role of the Transferable Ruble, by A. Rotleyder, 9 pp.  
RUSSIAN, per, Den'gi i Kredit, Moscow, No. 12, 1967, pp. 26-31.  
JPRS 44,389

The Role of the Foreman in Production, by P. Likhodiy, 10 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, 1958, pp. 24-25.  
JPRS 44,333

Embezzlement of State Funds by Accountant and Cashier at Motor Transport Management, by A. Kovalev, 7 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, Jan 67, No. 1, p. 28.  
JPRS 44,333

Design and Construction of Industrial Parks, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 46, Nov 1967, p 21.  
JPRS 44077

USSR

Economic (Contd)

Administrative and Accounting Inadequacies of the Motor-Transport System, by N. Fomichev, 6 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 47, 1967, p 15.  
JPRS 44074

Bonus Planning Problems, by A. Migralejev, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 49, Dec 1967, p 13.  
JPRS 44091

Scientific Organization of Labor in Agriculture, 23 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 49, Dec 67, pp. 23-26.  
JPRS 44,361

Construction Lagging at Machine Building Enterprises, 6 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 50, Moscow, Dec 67, p. 3.  
JPRS 44,378

Belorussia Experiments with Production Concentration, by S. Kishkin, 8 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, p 12.  
JPRS 44100

Proposals for Integrating Optimum Regional Plans, by A. Bogored, 8 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, p 17.  
JPRS 44100

General Resume of Economic and Cultural Development in Dagestan, by V. Spirkin, 11 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, pp 26-27.  
JPRS 44100

Requirements for Construction in the Far North, by V. Kolyada, M. Kim, 5 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 50, Dec 1967, p 40.  
JPRS 44077

USSR  
Economic (Contd)

The Status and Prospects of the Interbranch Balance, by V. Kossov, 8 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 51, Dec 1967, pp 15-16.  
JPRS 44078

Chairman of 21st Session of CMEA Discusses 'New Type of Economic Relations Among Socialist Nations', 9 pp.  
RUSSIAN, np, Ekonomicheskaya Gazeta, No 51, Dec 1967, pp 40-41.  
JPRS 44080

Interview With Deputy Chairman of the Council of Ministers RSFSR, K.M. Gerasimov, 7 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 3.  
JPRS 44,260

Development of Metals Industry, by V. Perederayev and V. Andreyev, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 8.  
JPRS 44,266

Meeting in Kursk Discusses Problems of Material and Technical Supply, 18 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, pp. 10-12.  
JPRS 44,260

Labor Resources of Armenian Republic, by N. Adonts and V. Kuregyan, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 52, Dec 67, p. 23.  
JPRS 44,361

Republic-Level Conference of Economists in Vil'nyus, Lithuanian SSR, by I. Kovalenko, and G. Emdin, 12 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, pp. 9-11.  
JPRS 44,333

Ministry of Local Industry of Latvian SSR Under Cost Accounting System, by I. Kovalenko, 6 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 17.  
JPRS 44,200

Union Republic Ministries of Rural Construction Urged to Transfer to New System to Help Ensure Fulfillment of 1968 Plans, by S. Khitrov, 8 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, pp. 18-19.  
JPRS 44,379

USSR  
Economic (Contd)

Basic Features of the 1968 Plan for the National Economy of the Soviet Union, by A. Lalayants, 10 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, pp. 22-23.  
JPRS 44,333

Suggestions for Improving Coordinated Planning on the Oblast Kray, Autonomous-Republic, and Economic-Region Level, by L. Levina, 7 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 1, Jan 68, p. 30.  
JPRS 44,333

Standard Planning Methods Still Needed for Trade Organizations, by Ye. Fonarev, 7 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 40.  
JPRS 44,373

CMEA Session in Budapest, by A. Belyayev, 5 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, No. 1, Moscow, Jan 68, p. 42.  
JPRS 44,389

Inter-Type Standardization Introduced in Ul'yanovsk Plant, by P. Druzhinin and A. Sklyarov, 5 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 2, Moscow, Jan 68, p. 9.  
JPRS 44,411

Scientific Research and International Cooperation, 6 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 3, Jan 68, p. 40.  
JPRS 44,389

General Construction Quotas for 1968, by A. Repenao, 16 pp.  
RUSSIAN, per, Ekonomicheskaya Stroitel'stva, No. 1, Moscow, 1963, pp. 3-11.  
JPRS 44,378

Material Stimuli and the Reproduction of Manpower, by V. Yagodkin Docent, 10 pp.  
RUSSIAN, per, Ekonomicheskiye Nauki, Moscow, No. 12, Dec 67, pp. 20-27.  
JPRS 44,418

Overall Mechanization and Effectiveness of Production in Road Construction, by L. Kvintitskaya, 7 pp.  
RUSSIAN, journal, Ekonomicheskiye Nauki, Moscow, No. 12, 1967, pp. 49-54.  
JPRS 44,263

USSR  
Economic (Contd)

Methods of Studying Consumer Demand and the Market Discussed by Communist Nations at Moscow Conference, by F. G. Gurvich, 7 pp.  
RUSSIAN, per, Ekonomika i Matematicheskiye Metody, No 6, Nov-Dec 1967, pp 925-942.  
JPRS 44030

Young Scientists Hold Conference on Economic and Mathematical Methods, by G. Z. Davidovich, 5 pp.  
RUSSIAN, per, Ekonomika i Matematicheskiye Metody, No 6, Nov-Dec 1967, pp 947-948.  
JPRS 44100

Capital Investments in Trade, by M. Kozub, 6 pp.  
RUSSIAN, monthly, Ekonomika Sovetskoy Ukrainy, No. 10, Oct 67, pp. 55-58.  
JPRS 44,373

Progress of Ukrainian SSR Since 1917, by P. Rozenko, 12 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No 22, Nov 1967, pp 1-9.  
JPRS 44078

Estonian Wood Carving Industry: An Historical Review, by A. Viies.  
RUSSIAN, bk, Esti Rahvaparane puutoondus ajalooline ulevaade. Esti riklik kirjastus. Tallinn, Eesti NSV Teaduste Akademia Ajaloo Instituut, 1960, 332 1/2 pp.  
\*CSFTI TT 68-50342

The State Budget of the USSR for 1968, 5 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 3-6.  
JPRS 44,302

The Fulfillment of the Budget Income Plan is the Task of Every Finance Organ, by V. Dementsev, 12 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow 1967, pp. 7-15.  
JPRS 44,302

Distributive Relationships and Production Efficiency, by S. Sitaryan, 14 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 30-40.  
JPRS 44,302

USSR  
Economic (Contd)

Problems in the Formation and Utilization of Current Assets Under the New Conditions, by M. Shermenev, 10 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 41-47.  
JPRS 44,302

Concerning the Improvement of Payment Relations, by V. Zashkovskiy, 7 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 47-51  
JPRS 44,302

Power Systems Under the New Conditions, by Ye. Karateyeva, 10 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 56-59.  
JPRS 44,302

A New System of Payments for Design Work, by Ye. Pliskovskiy, and V. Petukhov, 5 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 63-65.  
JPRS 44,302

Economic Work in the Government Insurance Organs of the Tatar ASSR, by G. Tagiyev, 6 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 75-77.  
JPRS 44,302

The Evaluation of the Work of Food and Light Industry Enterprises and the Formation of Economic Incentive Funds, by V. Maslennikov and V. Prokopov, 14 pp.  
RUSSIAN, journal, Finansy SSSR, No. 11, Moscow, 1967, pp. 83-89.  
JPRS 44,302

Proceedings of a Meeting of the Collegium of the Ministry of Finance USSR, 8 pp.  
RUSSIAN, per, Finansy SSSR, No. 11, Moscow, 1967, pp. 94-96.  
JPRS 44,302

Planned Measures for Increasing the Production of Oil and Natural Gas in Western Kazakhstan, by A. Isentayev, 5 pp.  
RUSSIAN, np, Kazakhstanskaya Pravda, 8 Dec 1967, p 2.  
JPRS 44102



USSR  
Economic (Contd)

Problems in Settling the North Discussed, by Yu. Balakirev, 7 pp.  
RUSSIAN, per, Komsomol'skaya Pravda, 1 Dec 1967, p 1.  
JPRS 44091

Application of Scientific Achievements in Production, by M. Kabachnik, 5 pp.  
RUSSIAN, newspaper, Komsomol'skaya Pravda, Moscow, 9 Jan 68, p. 2.  
JPRS 44,342

A Short Dictionary of Fishery Terms, by A. A. Klykov, 66 pp.  
RUSSIAN, dictionary, Kratkiy Slovar' Rybatskikh Promyslovnykh Sloz, 1959, 79 pp.  
JPRS 44072

Growth of Machine Building and Tool Industry, by A. Ya. Vyatkin, 9 pp.  
RUSSIAN, per, Mekhanizatsiya i Avtomatizatsiya Proizvodstva, No. 11, Moscow, Nov 67, pp. 1-4.  
JPRS 44,185

Economy Hurt by Lag in Ferrous Metallurgy, by M. A. Pertsev, 5 pp.  
RUSSIAN, per, Metallurg, No. 1, Moscow, Jan 68, pp. 1-2.  
JPRS 44,409

Fifty Years of the Soviet Oil Refining Industry, by D.I. Notkin, 14 pp.  
RUSSIAN, per, Neftskhimiya, Vol 7, No. 5, Moscow, Sept-Oct 67, pp. 651-660.  
JPRS 44,410

Developing Oil and Gas Resources, by M. M. Brenner, 9 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No 11, Nov 1967, pp 14-20.  
JPRS 44102

Northern Caucasus Oil Association Converts to New System, by V.B. Nazarov, et al., 8 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No. 12, Moscow, Dec 67, pp. 1-4.  
JPRS 44,377

USSR  
Economic (Contd)

Difficulties of New Economic System in Geological Prospecting, by I.M. Alekhin and V.A. Shein, 5 pp.  
RUSSIAN, per, Neftyanoye Khozyaystvo, No. 12, Moscow, Dec 67, pp. 4-5.  
JPRS 44,377

Brief History of Soviet Economic and Social Progress, by F. Mikhaylov, 9 pp.  
RUSSIAN, per, Partiyaya Zhizn' Kazakhstana, No 11, 1967, pp 42-47.  
JPRS 44078

Improving Soviet Economic Management and Management Personnel Training, by V. Lisitsyn and G. Popov, 5 pp.  
RUSSIAN, newspaper, Pravda, Moscow, 19 Jan 68, p. 2.  
JPRS 44,333

Fundamental Problems Involved in Creating Automatic Control Systems for the National Economy, by K. N. Rudnev.  
RUSSIAN, per, Pribory i Sistemy Upravleniya, Vol 10, No 10, 1967, pp 1-3.  
\*Dept of Navy/APL/JHU J-1135

Basic Terms and Problems in Creating Automatic Systems for Controlling Technological Processes, by I. K. Petrov.  
RUSSIAN, per, Pribory i Sistemy Upravleniya, Vol 10, No 10, 1967, pp 14-16.  
\*Dept of Navy/APL/JHU J-1136

Some Results of State Expert Control of Construction Design for Projects, by I.A. Levin, 8 pp.  
RUSSIAN, journal, Promyshlennoye Stroitel'stvo, Moscow, No. 12, 1967, pp. 5-7.  
JPRS 44,263

Defective Brick Causes Steel Losses at Zaporozhstal', by Ye Karasiychuk, 5 pp.  
RUSSIAN, newspaper, Rabochaya Gazeta, Kiev, 3 Jan 68, p. 3.  
JPRS 44,266

USSR  
Economic (Contd)

The Fishing Industry of Lithuania and Prospects for Its Development, by E. M. Urbonavichius, V. I. Kal'nibolotskiy.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 4-7.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foriegn Fisheries

Revision of the Regulations on the Application of Norms for Load-Transfer Operations at Sea, by I. Gol'dman.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 31-32.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Aspects of Searching and Fishing for Squid, by A. A. Baral.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 39-41.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch, of Foreign Fisheries

Proportions (of Vessels and Operations) in the Ocean Fishing Industry, by Yu. L. Korotkov.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 74-77.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Methods of Profit Analysis, by A. P. Krivonosov.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 78-79.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

The Economic Effectiveness of Raising Vegetarian fish in the Volga Delta, by I. D. Miazin.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 80-82.

\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foerign Fisheries

The Role of Economic Laws in Economic Management, by G. Liberman, 6 pp.  
RUSSIAN, newspaper, Sovetskaya Latvya, Riga, 22 Dec 67, p. 3.  
JPRS 44,334

USSR  
Economic (Contd)

Recommendations Voiced for Improving Incentives on Sovkhozes, by T. Puryшева, 7 pp.  
RUSSIAN, per, Sovetskiye profsoyuzy, No. 22, Moscow, Nov 67, pp. 14-15.  
JPRS 44,351

Planned Wage and Social Benefits, by Yu. Pak, 9 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 12-17.  
JPRS 44091

Labor Productivity in USSR for 50 Years, by L. Kostin, 16 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 18-28.  
JPRS 44091

Organization of Labor and Rest Under the Five-Day Work Week, by P. Sklyarov, 11 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 39-45.  
JPRS 44091

Improvement of Pay Systems in USSR, by Ye. Kapustin, 15 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 63-72.  
JPRS 44091

Development of Forms and Systems of Pay in Industry, by S. Shkurko, 19 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 73-85.  
JPRS 44091

Strengthening of the Public Economy and Growth of Payment for Labor in Kolkhozes, by F. Tabeyev, 12 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 86-93.  
JPRS 44091

Social Development of the Production Collective, by G. Renne, 11 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 11, 1967, pp 132-138.  
JPRS 44091

USSR  
Economic (Contd)

Official Decree on Work of State Trade and Consumer Cooperatives, 13 pp.  
RUSSIAN, np., Sovetskaya Torgovlya, 19 Dec 1967, p 2.  
JPRS 44075

Reducing the Number of Stages in Wholesale Circulation and Movement of Foodstuffs, by A. Polovnikov, 5 pp.  
RUSSIAN, per, Sovetskaya Torgovlya, No 12, Dec 1967, pp 20-22.  
JPRS 44101

Contract Nonfulfillment Penalties Elaborated, by I. Duel', 5 pp.  
RUSSIAN, np., Sovetskaya Torgovlya, Moscow, 6 Jan 68, p. 3.  
JPRS 44,200

Development of Rural Retail Trade in the RSFSR, by M. Denisov, 6 pp.  
RUSSIAN, newspaper, Sovetskaya Torgovlya, Moscow, 11 Jan 68, p. 3.  
JPRS 44,200

Problems of the Economic Reform in Capital Construction, by N. Mikhaylov, 8 pp.  
RUSSIAN, np., Stroitel'naya Gazeta, 8 Dec 1967, p 2.  
JPRS 44077

Methods of Fulfillment of the Five-Year Plan in Construction in the Far East, by I. Klepikov, 6 pp.  
RUSSIAN, newspaper, Stroitel'naya Gazeta, Moscow, 15 Dec 67, p. 3.  
JPRS 44,374

Evaluation of the Building Materials Industry of the Latvian Republic, by N.N. Bolotov, 5 pp.  
RUSSIAN, per, Stroitel'nyye Materialy, No.12, Moscow, Dec 67, pp. 3-4.  
JPRS 44,262

Results of the New Management Conditions, by G.I. Vilinov, et al., 5 pp.  
RUSSIAN, per, Stroitel'nyye Materialy, No. 12, Moscow, Dec 67, pp. 11-12.  
JPRS 44,262

USSR  
Economic (Contd)

Academician Discusses Aspects of New Economic System, 5 pp.  
RUSSIAN, newspaper, Trud, Moscow, 21 Dec 67, p. 2.  
JPRS 44,334.

The Economic Reform in Action at the Cement Plants of the Soviet Union, by A.N. Lyusov, and A.D. Yevdokimenko, 6 pp.  
RUSSIAN, journal, Tsement, Moscow, No. 6, 1967, pp. 1-2.  
JPRS 44,216

Estimate Price Formation and Project Accounting of Expenditures for Construction Procedures, by V. Tolstoy, 15 pp.  
RUSSIAN, per, Vestnik Statistiki, No 11, 1967, pp 36-44.  
JPRS 44077

Statistics on Soviet Trade, 26 pp.  
RUSSIAN, per, Vestnik Statistiki, No 12, Dec 1967, pp 77-90.  
JPRS 44101

50 Years in the Service of the Land of the Soviets, by K. Ya. Sergeychuk.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 4-9.  
JPRS 44475

In the Years of the Soviet Regime, by A. P. Kharazyan.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 46-51.  
JPRS 44475

The Big Changes, by A. M. Malakhiyev.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 52-59.  
JPRS 44475

1967 Moscow Conference on Interbranch Balance, by N. Lagutin, I. Motorin, 5 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 10, Oct 1967, pp 157-159.  
JPRS 44080

New Economic Accomplishments and New Plans, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 3-11  
JPRS 44,184

USSR  
Economic (Contd)

Socialist Division of Labor and Industrial Development of the Union Republics, by Yu. Vorob'yev, 10 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 12-18.  
JPRS 44073

Economic Development of the Ukraine During the Years of Soviet Power, by S. Yampol'skiy, 11 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 19-26.  
JPRS 44073

The October Revolution and Transformation of the Economy of Belorussia, by F. Martinkevich, 8 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 27-32.  
JPRS 44073

Flourishing of National Economy of Uzbekistan, by O. Izhamalov, 9 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 33-38.  
JPRS 44073

Economic Achievements of the Armenian SSR, by A. Arakelyan, 10 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 39-45.  
JPRS 44073

On Changing the Material Consumption of Social Production, by V. Rutgayzer, 16 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 46-55.  
JPRS 44,184

Problems in Improving Efficiency Indices of Social Production, by L. Kochetkov, et al. 9 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 56-61.  
JPRS 44,184

Problems in Optimal Planning of the National Economy, by A. Skryabin, 15 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 62-70.  
JPRS 44,184

USSR  
Economic (Contd)

Improving Management and Planning Under the Economic Reform, by L. Pekarskiy, et al, 24 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 71-84.  
JPRS 44,184

Production Specialization and Labor Productivity, by A. Rogov and V. Chernykh, 12 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 109-115.  
JPRS 44,184

Calculation of the Aggregate Expenditure of Labor, by A. Bugutskiy, I. Bulakh, 12 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 123-129.  
JPRS 44091

Need for Creative Research in Economics, by K.V. Ostrovityanov, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No. 11, Nov 67, pp. 148-150.  
JPRS 44,184

Population Studies in the USSR, by D. Valentey, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 154-156  
JPRS 44091

Latest Trends in the Distribution of USSR Productive Resources, by N. Batova, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 11, Nov 1967, pp 158-160.  
JPRS 44073

Problems in Forming Material Incentive Fund, by F. Veselkov, 16 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 3-15.  
JPRS 44,300

Imaginary and Actual Reserves in Shift Work, by Ya. Kvasha, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 16-26.  
JPRS 44,300

Problems of Cost Accounting in Operating Industrial Associations, by A. Pevzner, 14 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow, Dec 67, pp. 27-38.  
JPRS 44,300

USSR  
Economic (Contd)

Forecasting the Demand for New Equipment, by  
A. Konson, 13 pp.  
RUSSIAN, per, Voprosy Ekonomiki, Moscow,  
No. 12, Dec 67, pp. 39-47.  
JPRS 44,334

A Description of Soviet Occupational Categories  
and Training for Workers, by L. Zverev, 6 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 12, Dec 1967,  
pp 59-63.  
JPRS 44091

Main Directions in Improving Prices in Mutual  
Trade Among CEMA Member-Countries, by  
V. D'yachenko, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 64-74.  
JPRS 44,389

Economic Measures for Efficient Use of Water  
Resources, by M. Loyter, 19 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12,  
Moscow, Dec 67, pp. 75-86.  
JPRS 44,270

Assessments of Natural Resources, by Yu.  
Sukhotin, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 87-98.  
JPRS 44,259

Cooperation of CEMA Member-Countries in the  
Intensification of Agriculture, by V. Storozhev,  
14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 99-107.  
JPRS 44,389

Economic Reforms in the Construction Sector  
in the European CEMA MEMBER-Countries, by  
V. Koslov and M. Perel'man, 14 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 108-116.  
JPRS 44,389

"Convergence of the Levels of Economic Devel-  
opment of the Socialist Countries", by  
Yu.N. Belyayev, by B. Mikhaylov, 5 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 140-142.  
JPRS 44,382

USSR  
Economic (Contd)

Industrial and Agricultural Planning Program  
Developed, by A. Klinskiy and N. Lagutin,  
5 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No. 12, Moscow,  
Dec 67, pp. 150-152.  
JPRS 44,333

Progress of the Economic Reform, by T.  
Khachaturov, 5 pp.  
RUSSIAN, newspaper, Vyshka, Baku 3 Jan 68,  
pp. 2-3.  
JPRS 44,333

New Purchase Prices and Guaranteed Wages  
for Kolkhoz Workers, by V. Yermenko, 6 pp.  
RUSSIAN, journal, Zakupki Selskokhozyay-  
stvennykh Produktov, No. 1, Moscow, Jan 67,  
pp. 30-35.  
JPRS 44,307

Seventh Congress of Producer Cooperatives of  
the Mongolian People's Republic, 16 pp.  
MONGOLIAN, newspaper, Hodolmor, Ulan Bator,  
18 Oct 67, pp. 2 and 3.  
JPRS 44,211

A New Kidskin Factory, by Ts. Mishigdor, 5 pp.  
MONGOLIAN, newspaper, Unen, Ulan Bator,  
10 Oct 67, p. 1.  
JPRS 44,211

Political

The 50th Anniversary of the October Revolution  
and the Contemporary Workers Movement, by  
B. Ponomarev, 36 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 14-34.  
JPRS 44,303

The October Revolution and the Struggle for  
Peace, by Luigi Longo, 11 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 33-41.  
JPRS 44,303

The Ideas of the October Revolution in the  
Arab East, by Khaled Bagdash, 17 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 42-52.  
JPRS 44,303

USSR  
Political (Contd)

Party Leadership is Scientific Leadership,  
by A. Voss, 18 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 71-81.  
JPRS 44,303

The Path of the Soviet Peasant, by T. Mal'tsev,  
16 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 94-103.  
JPRS 44,303

The Influence of the October Revolution on the  
Development of Artistic Thought, by B. Suchkov,  
19 pp.  
RUSSIAN, per, Kommunist, No. 17, Moscow,  
Nov 67, pp. 116-127.  
JPRS 44,303

Collective Agreement and the Enterprise,  
by G. Moskalenko, 5 pp.  
RUSSIAN, newspaper, Trud, Moscow, 23 Jan 68,  
p. 2.  
JPRS 44,418

International Symposium of Young Socialist  
Social Scientists, by V. Simchera, 6 pp.  
RUSSIAN, journal, Voprosy Ekonomiki, No. 12,  
Moscow, 1967, pp. 145-147.  
JPRS 44,259

Military

Combating Aerospace Targets, by P. V. Morozov,  
40 pp.  
RUSSIAN, bk, Bor'ba s Vozdushno-Kosmicheskimi  
Tselyami, 1967, pp 2, 97-120, 143, 144.  
JPRS 44083

Engineer Security of the March and Meeting Engage-  
ment of Motorized Rifle (Tank) Battalion, by A.  
P. Balokon' and V. I. Kalayda, 162 pp.  
RUSSIAN, bk, Inzhenernaya Obespecheniye Marcha  
i Vstrechnogo Boya Motostrelkovogo (Tankovogo)  
Batal'ona, 1967.  
\*ACSI J-4202  
ID 2204002268

USSR  
Military (Contd)

Propagandizing the Law of Universal Military  
Obligation, by Col.Gen.K. Grushevoy,  
9 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Dec 67, Moscow, pp. 22-28.  
JPRS 44,268

Improving the Combat Skill of the Missile  
Men, by Col.Gen. A. Shevtsov, 7 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Moscow, Dec 67, pp. 29-33.  
JPRS 44,268

Guarding the Security of the Soviet State,  
by Lt.Gen.V. Fedorchuk, 9 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
No. 24, Moscow, Dec 67, pp. 44-49.  
JPRS 44,268

The Role of Transport in Modern War, by  
Gen.Lt. I. Kovalev, 10 pp.  
RUSSIAN, per, Kommunist Vooruzhennykh Sil,  
Moscow, No. 23, Dec 67, pp. 54-60.  
JPRS 44,268

Approach March and Meeting Engagement of Small  
Tank Units, by N. K. Shishkin.  
RUSSIAN, per, Marsh i Vstrechnyy Boy Tankovykh  
Podrazdeleniy, 1967, 214 pp.  
\*ACSI J-4201  
ID 2204002168

The March and Meeting Engagement of Tank  
Podrazdeleniyas, by N. K. Shishkin, 5 pp.  
RUSSIAN, bk, Marsh i Vstrechnyy Boy Tankovykh  
Podrazdeleniy, 1967, pp 2, 3-5, 215-216.  
JPRS 44083

Fifty Years of the VMF Services, by B.M.  
Volosatov, and V.A. Russov, 10 pp.  
RUSSIAN, per, Morskoy Sbornik, No. 11, Moscow,  
67, pp. 52-58.  
JPRS 44,186

The Regime of the Naval Blockade Under  
Contemporary International Law, L.A. Ivan-  
ashchenko, 10 pp.  
RUSSIAN, per, Morskoy Sbornik, No. 11, Moscow,  
1967, pp. 85-90.  
JPRS 44,186

USSR  
Military (Contd)

Parachute Jumps from Military Transport Aircraft, by K. A. Ovsiannikov, 66 pp.  
RUSSIAN, per, Pryzhki s Parashyutom iz Voenno-Transportnykh Samoletov, 1964, pp 10-15; 18-21; 24-47; 54-55; 58-65; 82-85; 100-103; 116-119; 130-151; 182-189; 212-213.  
ACSI J-3860  
ID 2901031866

Radar in Antimissile Defense, by A. I. Leonov, 21 pp.  
RUSSIAN, bk, Radiolokatsiya v Protivoraketnoy Oborone, 1967, pp 2, 3-4, 5-17, 127-132, 133-134.  
JPRS 44083

DOSAAF Functions Regarding the Law on General Military Duty, 15 pp.  
RUSSIAN, np, Sovetskiy Patriot, 20 Dec 1967, p 2.  
JPRS 44083

DOSAAF Plenum Pledges Adherence to new Military Law, 8 pp.  
RUSSIAN, np; Sovetskiy Patriot, 24 Dec 1967, p 3.  
JPRS 44083

Second Plenum of the Central Committee of DOSAAF, 12 pp.  
RUSSIAN, np, Sovetskiy Patriot, 24 Dec 1967, pp 3-4.  
JPRS 44083

Watch Officer's Handbook, by A. P. Pronichkin.  
RUSSIAN, bk, Spravochnik Vakhtennogo Ofitsera, 1967.  
\*Dept of Navy NIC

Anti-Tank Training Podrazdeleniya, by Col. A. Loshchilov, 6 pp.  
RUSSIAN, per, Starshina-Serzhant, No. 12, Moscow, 1967, pp. 8-10.  
JPRS 44,417

Atomic-Powered Submarine Design, by V. M. Bukalov and A. A. Narushbayev, 282 pp.  
RUSSIAN, bk, Sudostroyeniye, 1964.  
P500032368-V  
Dept of Navy/NIC Trans No 2498

USSR  
Military (Contd)

Handbook for Autoloader Operators, 7 pp.  
RUSSIAN, per, Transport, 1966, pp 1-9.  
ACSI J-3901  
ID 2204058667

Defense of Nuclear Submarines, by V. F. Droblenkov & V. N. Gerasimov.  
RUSSIAN, bk, Ugroza iz Glubini, 1966, pp 170-177.  
Dept of Navy NIC tr 2525

Manual of International Maritime Law (Part I), by P. D. Barabolya and A. S. Bakov.  
RUSSIAN, bk, Voyenno-Morskoy Mezhdunarodno-Pravovoy Spravochnik, Moscow, 1966.  
Dept of Navy NIC 2500 (a)

Manual of International Maritime Law (Part II), by P. D. Barabolya & A. S. Bakov.  
RUSSIAN, bk, Voyenno-Morskoy Mezhdunarodno-Pravovoy Spravochnik, 1966.  
Dept of Navy NIC tr 2500 (b)

Soviet Marshall Recounts Spanish Civil War Campaign, by K. A. Meretskov, 14 pp.  
RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, No 7, 1967, pp 53-61.  
JPRS 44083

Fundamental Orientation In DOSAAF Functions, by V. Sysoyev, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 12-13.  
JPRS 44,215

DOSAAF Achievements in the Anniversary Year Strengthen the Might of the Fatherland, by G. Shatunov, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 16-18.  
JPRS 44,215

Special Knowledge Needed by Medical Service Personnel, by R. Mordvinov and A. Nazarenko, 5 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 30-31.  
JPRS 44,215

Gomel'skaya Oblast Takes Active Role in Civil Defense Work, by A. Kargin, 5 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, Nov 67, pp. 33-34.  
JPRS 44,215

USSR  
Military (Contd)

Civil Defense Exercise Shows Value of Training,  
by Ya. Kantor, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, Moscow, No. 12,  
Dec 67, pp 16-17.  
JPRS 44,380

Volgograd Mounts Civil Defense Program,  
by A. Nebenzya, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 14-15.  
JPRS 44,380

A Brief Report on Modern Means of Warfare  
Theme Two, by V. Mordvinov, 7 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 18-19.  
JPRS 44,380

Shelters and Covers Part Three, by A.  
Kharkevich, 6 pp.  
RUSSIAN, per, Voyennyye Znaniya, No 12,  
Moscow, Dec 67, pp. 20-21.  
JPRS 44,380

Fire Shield of the Soviet Union.  
BULGARIAN, per, Armeyski Pregled, No 11, 1967,  
pp 65-68.  
\*ACSI J-4361  
ID 2204006268

Sociological

Soviet Higher Electrotechnical Education,  
by V.P. Yalyutin, 12 pp.  
RUSSIAN, per, Elektrichestvo, Moscow,  
No. 12, Dec 67, pp. 1-5.  
JPRS 44,261

Reasons for Departure of Youth from Country-  
side Examined, by Aleksandr Yanov, 12 pp.  
RUSSIAN, newspaper, Literaturnaya Gazeta,  
No. 52, Moscow, 27 Dec 67, p. 10.  
JPRS 44,270

Clarification of September 1967 Social  
Insurance Regulation, by G. Simonenko, 6 pp.  
RUSSIAN, publication, Okhrana Truda i Sotsial'-  
noye Strakhovaniya, No. 1, Moscow, Jan 1968,  
pp. 40-41.  
JPRS 44,420

USSR  
Sociological (Contd)

Landscape Promoted as Link Between Man and  
Nature, by V. Dobrokhvalov, 4 pp.  
RUSSIAN, newspaper, Pravda, Moscow, 26 Dec 67,  
p. 3.  
JPRS 44,422

A General Survey of Murmanskaya Oblast, by  
V. V. Pokshishevskiy, et al., 21 pp.  
RUSSIAN, monograph, Severo-Zapad RSFSR,  
"Mysl" Publishing House, Moscow, 1964,  
pp. 593-614.  
JPRS 44,352

Discipline: A Crucial Factor in Organization of  
Social Labor, by N.V. Sviridov, 15 pp.  
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,  
Moscow, No. 12, Dec 67, pp. 11-20.  
JPRS 44,418

Labor Protection Practices in the Construction  
and Building Materials Industry, by I. Kolesnikov,  
5 pp.  
RUSSIAN, per, Stroitel'naya Gazeta, 8 Dec 1967,  
p 2.  
JPRS 44091

Theoretical Problems of Guiding the  
Society, by E.M. Korzheva, et al, 8 pp.  
RUSSIAN, per, Voprosy Filosofii, No. 11,  
Moscow, 1967, pp. 136-140.  
JPRS 44,291

Biographic

I. V. Kurchatov, by I. N. Golovin.  
RUSSIAN, bk, Atomizdat, Moscow, 1967, 109 pp.  
\*ACSI J-4343  
ID 2204005168



## EASTERN EUROPE

### Economic

We Must Develop the Technical-Scientific Revolution and Continue to Increase Labor Productivity, by Harilla Papajorgji, 7 pp. ALBANIAN, per, Zeri i Popullit, Tirana, 24 Nov 67, pp. 2-3. JPRS 44,218

The Trade Unions and the Decree on Increasing Profitability in the Economy, 6 pp. BULGARIAN, per, Bulgarski Profsuyuzi, No. 12, Sofia, Dec 67, pp. 2-4. JPRS 44,190

Economic Interests and the New System of Management in Industry, by Iliya Vulkov, 12 pp. BULGARIAN, per, Novo Vreme, Sofia, No. 12, Dec 67, pp. 18-27. JPRS 44,257

Some Problems of the Economic Development of Varna Okrug, by Todor Stoychev, 12 pp. BULGARIAN, per, Novo Vreme, Sofia, No. 12, Dec 67, pp. 96-102. JPRS 44,257

Problems in the Machine-Building Industry Discussed, by Eliezer Gershonov, 14 pp. BULGARIAN, per, Planovo Stopanstvo i Statistika, No. 9, Sofia, Nov 67, pp. 3-12. JPRS 44,195

The Proper Establishment of an Award Account in State Economic Associations, by Stamo Zh. Stamo, 11 pp. BULGARIAN, per, Schetovodstvo i Kontrol, Sofia, No. 8, Oct 67, pp. 16-23. JPRS 44,190

Control Over Compliance With the Foreign Trade System, by Ivan Protich and Boyan Ivanchev, 6 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 5-7. JPRS 44,248

Some Problems in the Administration and Organization of Foreign Trade, by Docent Ivan Nikolov, 7 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 8-10. JPRS 44,248

## Eastern Europe Economic (Contd)

The Legal Aspects of Achieving the Currency Limits Set on Import, by Chudomir Goleminov, 8 pp. BULGARIAN, per, Vunshna Turgoviya, Sofia, No. 11, Nov 67, pp. 11-13. JPRS 44,248

Survey of Opinions on Exchange Rate, by Frantisek Fojtik, 13 pp. CZECH, per, Ekonomicka Revue, No. 12, Prague, 1967, pp. 532-538. JPRS 44,283

Eliminating Time Gaps in Effecting Economic Ideas, by Bohumil Sucharda, 8 pp. CZECH, per, Nova Mysl, Prague, No. 26, 28 Dec 67, pp. 28-31. JPRS 44,231

Relationship of Organizations to the State Budget, 6 pp. CZECH, official publication, Strika Zakonu Ceskoslovenske Socialisticke Republiky, No. 40, Prague, 24 Nov 67, pp. 390-392. JPRS 44,394

Agricultural Supply and Purchase in 1967, by K. Thiele, 7 pp. CZECH, weekly, Socialisticke Zemedelstvi, No. 52, Prague, 29 Dec 67, pp. 1-2. JPRS 44,201

Use of Feed from the Central Fund in 1968, 8 pp. CZECH, weekly, Socialisticke Zemedelstvi, No. 52, Prague, 29 Dec 67, p. 6. JPRS 44,201

The Station Foreman in Railroad Transportation. CZECH, per, Zeleznicar, 29 Apr 1967, pp 2-3. DIA LN 276-68

The Maritime Revue. FRENCH, per, La Revue Maritime, No 239, Jan 1967. Dept of Navy MIC tr 2528

Foreign Trade Minister Discusses GDR-USSR Trade, by Horst Solle, 10 pp. GERMAN, per, Aussenhandel, No 11, Nov 1967, pp 1-6. JPRS 44059

Eastern Europe  
Economic (Contd)

USSR Plays Important Role in CEMA Development,  
by J. Brauna and P. Sydow, 10 pp.  
GERMAN, per, Aussenhandel, No 11, Nov 1967, pp 15-  
22.  
JPRS 44059

Opening of the Food Technology Work Conference,  
by Dr. Benecke.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6  
Lebensmittel Technologie Und Verpackung G 2006E),  
p 1.  
\*ACSI J-4326  
ID 2834022567

Rations for Bundeswehr Reserves, by Paul Mueller.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6  
Lebensmittel Technologie Und Verpackung G 2006E),  
p 2.  
\*ACSI J-4326  
ID 2834022567

Effects of the State Council Decision on  
Development of Budgeting and Finances, by  
Walter Kuehn, 5 pp.  
GERMAN, journal, Deutsche Finanzwirtschaft,  
No. 24, East Berlin, Dec 67, pp. S9-S11.  
JPRS 44,190

Circulating Fund Credits for Intercooperative  
Building Organizations, by Dieter Herrmann, 5 pp.  
GERMAN, journal, Deutsche Finanzwirtschaft,  
No. 24, East Berlin, Dec 67, pp. G16-G18.  
JPRS 44,190

West Berlin's Participation in Interzonal  
Trade, 9 pp.  
GERMAN, report, Deutsches Institut fuer Wirt-  
schaftsforschung, Vol 34, No. 50, West Berlin,  
15 Dec 67, pp. 265-168.  
JPRS 44,248

Decree on Establishment of the Bank of  
Industry and Commerce, by Willi Stoph, 20 pp.  
GERMAN, journal, Gesetzblatt der Deutschen  
Demokratischen Republik, Part 2, No. 2,  
East Berlin, 4 Jan 68, pp. 9-16.  
JPRS 44,315

Eastern Europe  
Economic (Contd)

Price Office Statutes Published, 9 pp.  
GERMAN, per, Gesetzblatt der Deutschen  
Demokratischen Republik, Part II, No. 3,  
East Berlin, 5 Jan 68, pp. 17-20.  
JPRS 44,257

Agreement of Legal Status and Privileges  
of Bloc Branch Organizations for Economic  
Cooperation, 5 pp.  
GERMAN, per, Gesetzblatt der Deutschen  
Demokratischen Republik, Part II, No. 7,  
East Berlin, 12 Jan 68, pp. 31-34.  
JPRS 44,357

Non-State Enterprise Financial System Develop-  
ment Measures, by Willi Stoph, 8 pp.  
GERMAN, journal, Gesetzblatt der Deutschen  
Demokratischen Republik, Part 2, No. 117,  
East Berlin, 15 Dec 67, pp. 821-824.  
JPRS 44,315

List of VVB General Directors in the GDR, 6 pp.  
GERMAN, per, IWE-Informationen-und Archiv-  
dienst, No. XII/102/1967, West Berlin, 21 Dec  
67, pp. 1-6.  
JPRS 44,274

Information on the VVB Chemical Installations,  
8 pp.  
GERMAN, per, IWE Wirtschaftsdienst, 17 Jan  
68, pp. 3-5 and 24 Jan 68, pp. 3-6.  
JPRS 44,349

Rolling Mill Rationalization Goals, by  
Kurt Singhuber, 8 pp.  
GERMAN, magazine, Neue Huette, Leipzig,  
No. 11, Nov 67, pp. 641-644.  
JPRS 44,348

The Process of International Standardization in  
Maritime Law and Criteria for the Inclusion of  
Rules of International Maritime Law in the Law of  
the GDR, by Rudi Frenzel.  
GERMAN, per, Seeverkehr, No 9, Sept 1967, pp 389-  
392.  
Dept of Navy MIC tr 2529

GDR-USSR Cooperation in Building Processing  
Machines and Vehicles, by Dr. Rudi Georgi,  
5 pp.  
GERMAN, per, Die Wirtschaft, No. 44, East  
Berlin, 1 Nov 67, pp. 13-14.  
JPRS 44,195

Eastern Europe  
Economic (Contd)

Joint Use of Natural Resources Urged for Warsaw Pact Countries, by Igor Koslow, 6 pp. GERMAN, per, Die Wirtschaft, East Berlin, 6 Dec 67, p. 23. JPRS 44,285

Development of Social Insurance and Welfare Income, 8 pp. GERMAN, per, Wochen Bericht, Berlin, No. 4, 25 Jan 68, pp. 15-18. JPRS 44,284

Changes in Management by the Ministry of Metallurgy and Machine Industry, 6 pp. HUNGARIAN, np, Figyelo, Budapest, 13 Dec 67, p. 4. JPRS 44,249

Technical Development Plans for 1968, 6 pp. HUNGARIAN, newspaper, Figyelo, Budapest, 20 Dec 67, p. 5. JPRS 44,248

Enterprise Programs for 1968, 6 pp. HUNGARIAN, newspaper, Figyelo, Budapest, 28 Dec 67, p. 5. JPRS 44,244

Decree on Turnover Taxes and Price Levelling, by Bela Sulyok, 8 pp. HUNGARIAN, newspaper, Magyar Kozlony, No. 92, Budapest 8 Dec 67, pp. 937-940. JPRS 44,219

Decree on the Establishment of Supervisory Boards at Industrial Firms, by Bela Sulyok, 5 pp. HUNGARIAN, newspaper, Magyar Kozlony, No. 95, Budapest, 15 Dec 67, pp. 974-975. JPRS 44,219

Decree on the Organizations and Functions of the Hungarian National Bank, 5 pp. HUNGARIAN, official publication, Magyar Kozlony, No. 96, Budapest, 17 Dec 67, pp. 989-990. JPRS 44,219

Eastern Europe  
Economic (Contd)

Party's Role in the New Economic Mechanism Discussed, by Vera Lajtai, 7 pp. HUNGARIAN, per, Partelet, No. 1, Budapest, Jan 68, pp. 9-15. JPRS 44,257

Hungary's Economic Plan for 1968, by Lajos Rev, 7 pp. HUNGARIAN, per, Tarsadalmi Szemle, No. 1, Jan 68, Budapest, pp. 10-15. JPRS 44,351

Reorganization of the Meat Economy and Related Problems, by Bohdan Jarema, 7 pp. POLISH, per, Gospodarka Miesna, Warsaw, No. 11, Nov 67, pp. 4-7. JPRS 44,347

Polish Heavy Industry Exports to the USSR, by Stanislaw Gruzewski, 8 pp. POLISH, per, Handel Zagraniczny, Warsaw, No. 11, 1967, pp. 437-440. JPRS 44,248

Polish-Soviet Economic Cooperation, by Artur Bodnar, 11 pp. POLISH, per, Investycje i Budownictwo, No 10, Oct 1967, pp 6-9. JPRS 44,059

An Appraisal of Equipment Services in Construction, by Franciszek Brzeski, 13 pp. POLISH, per, Investycje i Budownictwo, No. 11, Warsaw, Nov 67, pp. 11-16. JPRS 44,232

Organization of Equipment Administration and Its Effect on Construction, by T. Adamczyk, J. Kowalik, et al, 9 pp. POLISH, per, Investycje i Budownictwo, No. 11, Warsaw, Nov 67, pp. 16-19. JPRS 44,232

Contractual Sales of Bottled Alcoholic Products, 5 pp. POLISH, publication, Monitor Polski, No. 67, Warsaw, 12 Dec 67, pp. 673-674. JPRS 44,363

Eastern Europe  
Economic (Contd)

USSR Assists Polish Petroleum Industry, by Franciszek Wszolek, 18 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 301-309.  
JPRS 44095

USSR Helps Develop Polish Refining Industry, by Bronislaw Taban, 7 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 310-312.  
JPRS 44095

Soviet Crude Oil and Petroleum Products for Poland, by Wladyslaw Szumilas, 7 pp.  
POLISH, per, Nafta, No 10, Oct 1967, pp 312-315.  
JPRS 44095

Petroleum Industry Achievements and Goals, by T. Boczek, 8 pp.  
POLISH, per, Nafta, No 11, Nov 1967, pp 350-352.  
JPRS 44060

Grain Production Costs and Profitability in Peasant Farmsteads, by Zdzislaw Grochowski, 12 pp.  
POLISH, per, Nowe Rolnictwo, No 20, 16-31 Oct 1967, pp 1-5.  
JPRS 44096

Trawler Operation in the North Sea, by Brunon Noetzel.  
POLISH, per, Prace Morskiego Inst Rybackiego, Vol 12/B, 1964, pp 261-365.  
CFEII TT 66-57058

Achievements of CEMA Coal Industry Commission, by Florian Zajdel, 14 pp.  
POLISH, per, Przeglad Gorniczy, Vol 23, No 10, Oct 1967, pp 509-515.  
JPRS 44060

Thirty Years of Electrification of the Polish National Railways (PKP), by Karol Kuligowski.  
POLISH, per, Przeglad Kolejowy Elektrotechniczny, Feb 1967, pp 33-36.  
DIA LN 167-68

Polish-Soviet Scientific, Technical Cooperation, by Witold Walczewski, 5 pp.  
POLISH, per, Przeglad Mechaniczny, Warsaw, No. 20, 25 Oct 67, pp. 617-619.  
JPRS 44,202

Eastern Europe  
Economic (Contd)

Development of Polish Mining Industry, by Jan Litrega, 5 pp.  
POLISH, per, Przeglad Techniczny, No 49, 3 Dec 1967, pp 1,6.  
JPRS 44060

Automation of Polish Coal Mines, by Edward Mikula, 5 pp.  
POLISH, per, Przeglad Techniczny, No 49, 3 Dec 1967, p 7.  
JPRS 44060

Potato Industry Goals in 1966-1970, by Jerzy Turski, 7 pp.  
POLISH, per, Przemysl Spozywczy, Warsaw, No. 10, 1967, pp. 3-3.  
JPRS 44,201

Polish Metalworking Machine Tools on Foreign Markets, by Halina Murawska, 8 pp.  
POLISH, paper, Rynki Zagraniczne, No. 126, Warsaw, 21 Oct 67, p. 3.  
JPRS 44,248

Need for Improved National Economy Explained, by Prof. Bronislaw Minc, 5 pp.  
POLISH, daily, Trybuna Ludu, 14 Jan p. 3.  
JPRS 44,219

Future Development of Marine Economy Evaluated, by Witold Strak, 7 pp.  
POLISH, newspaper, Tygodnik Morski, No. 53, 31 Dec 67, pp. 1, 7, and 10.  
JPRS 44,203

New Pension System Discussed, by Jan Glowczyk, 5 pp.  
POLISH, per, Zycie Gospodarcze, Warsaw, No. 50, 10 Dec 67, pp. 1-2.  
JPRS 44,384

Durable Consumer Goods Supply in Urban and Rural Areas, by Krzysztof Krauss, 8 pp.  
POLISH, per, Zycie Gospodarcze, Warsaw, No. 50, 10 Dec 67, p. 3.  
JPRS 44,363

Achievements and Goals of the Communal Economy, by Andrzej Giersz, 7 pp.  
POLISH, per, Zycie Gospodarcze, No. 52/53, 24-31 Dec 67, pp. 1 and 4.  
JPRS 44,203

Eastern Europe  
Economic (Contd)

Production Guidelines for the Engineering Industry, 8 pp.  
POLISH, per, Zycie Gospodarcze, No. 52-53, 24-31 Dec 67, p. 5.  
JPRS 44,195

Review of 1968 Production, Export Problems, by Kazimierz Secomski, 5 pp.  
POLISH, daily, Zycie Warszawy, 30-31 Dec 67, 1 Jan 68, p. 3.  
JPRS 44,202

Increased Possibilities for Using Computers in Processing of Economic Data, by E. Macovei and I. Negescu, 9 pp.  
RUMANIAN, journal, Evidenta Contabila, No. 12, Bucharest, Dec 67, pp. 9-15.  
JPRS 44,305

More Profits Seen as Incentive to Enterprises, by Radu Manescu, 5 pp.  
RUMANIAN, newspaper, Gazeta Finantelor, Vol 15, No. 751, 6 Dec 67, Bucharest, pp. 1 and 4.  
JPRS 44,305

Financing and Granting Credit to Investment Projects, by M. Diamandopol, 5 pp.  
RUMANIAN, newspaper, Gazeta Finantelor, Vol 15, No. 751, 6 Dec 67, Bucharest, p. 4.  
JPRS 44,305

More Autonomy for Enterprises in Management of Own Funds, by Gheorghe Popescu, 6 pp.  
RUMANIAN, newspaper, Gazeta Finantelor, Vol 15, No. 753, Bucharest, 20 Dec 67, pp. 1 and 6.  
JPRS 44,305

Operating Process for the Production of Bread by the Method Involving the Intensive and Prolonged Kneading of Dough, by E. Calbalmos, N. Popescu.  
RUMANIAN, per, Industria Alimentara, No 11, 1967, pp 521-523.  
\*ACSI J-4355  
ID 2204006768

Decentralization Emphasized in Economic Organization and Management, 12 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47, No. 10, Bucharest, Oct 67, pp. 49-56.  
JPRS 44,219

Eastern Europe  
Economic (Contd)

Importance of Work Productivity in Economic Planning and Management, by Florin Burtan, 14 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47, No. 10, Bucharest, Oct 67, pp. 57-66.  
JPRS 44,219

Planning Rural Areas, by G. Gusti, 14 pp.  
RUMANIAN, monthly, Lupta de Clasa, Vol 47, No. 10, Bucharest, Oct 67, pp. 67-74.  
JPRS 44,219

The Goals of New Policy on Planning and Administration of the Economy Outlined, by Mihai Paraluta, 10 pp.  
RUMANIAN, newspaper, Munca, Bucharest, 28 November 67, pp. 1-3.  
JPRS 44,257

New Requirements for Territorial Organization and Rural Planning, by Petre Blajovici, 20 pp.  
RUMANIAN, per, Probleme Economice, Bucharest, No. 11, Nov 67, pp. 3-18.  
JPRS 44,358

The Decisive Role of Agriculture for Economic Progress, by N. Belli, 23 pp.  
RUMANIAN, per, Probleme Economice, Vol XX, No. 12, Bucharest, Dec 67, pp. 135-150.  
JPRS 44,358

The Place of Rumania in the International Division of Labor, by V. Axenciuc, 14 pp.  
RUMANIAN, per, Probleme Economice, Vol XX, No. 12, Bucharest, Dec 67, pp. 156-164.  
JPRS 44,385

Foreign Economic Relations of Rumania in the Period of Construction of Socialism, by Gh. Surpat and N. Ionel, 19 pp.  
RUMANIAN, per, Probleme Economice, Vol XX, No. 12, Bucharest, Dec 67, pp. 165-178.  
JPRS 44,385

Party and State Focus on Raising Workers' Standard of Living, by Gh. Badrus, 10 pp.  
RUMANIAN, daily, Scinteia, Bucharest, 29 Dec 67, pp. 1 and 6.  
JPRS 44,394

Eastern Europe  
Economic (Contd)

Development of Rumanian Industry, by Dr. Gh. P. Apostol, 10 pp.  
RUMANIAN, newspaper, Viata Economica, Bucharest, 22 Dec 67, pp. 2,3.  
JPRS 44,315

Development of the Tractor Industry, by C. Mihai, 7 pp.  
RUMANIAN, per, Viata Economica, Bucharest, No. 52, 29 Dec 67, pp. 16-28.  
JPRS 44,195

The Mechanization of Field-Crop Production in Yugoslavia, by Ugljesa Pavlovic, 11 pp.  
SERBIAN, per, Ekonomika Poljoprivrede, No 12, Dec.1967, pp 971-979  
JPRS 44096

The Present Position and Prospects of the Yugoslav Canning Industry(1), by Dr. Nedeljko Cermak, 7 pp.  
SERBO-CROATIAN, per, Hrana i Ishrana, Belgrade, No. 9-10, Sept.-Oct. 67, pp. 555-559.  
JPRS 44,393

Construction in 1967, by Milos Jaric, 13 pp.  
SERBO-CROATIAN, per, Izgradnja, Vol 22, No. 1, Belgrade, Jan 68, pp 2-8.  
JPRS 44,232

The Material Position of the Opstina and the Methods for its Self-Financing, 40 pp.  
SERBO-CROATIAN, per, Komuna, Vol 14, No. 11, Belgrade, Nov 67, pp. 2-17.  
JPRS 44,315

Slovenia, Serbia, Macedonia, Bosnia-Herzegovina, and Montenegro in 1968, 13 pp.  
SERBO-CROATIAN, per, Privredni pregled, Belgrade, 1 Jan 68, pp. 7-8.  
JPRS 44,351

Basic Law on the Contribution for Use of City Land, 5 pp.  
SERBO-CROATIAN, publication, Sluzbeni List SFRJ, No. 51, Belgrade, 20 Dec 67, pp. 117-118.  
JPRS 44,305

Eastern Europe  
Economic (Contd)

Construction Under the Economic Reform, by Milos Jaric, 13 pp.  
SERBO-CROATIAN, per, Tehnika, Belgrade, No. 12, Dec 67, pp. 2049-2056.  
JPRS 44,363

The Banking System Before and During the Implementation of the Economic Reform, by Dzevad Gluhbegovic, 10 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp.1-5.  
JPRS 44,283

Joint Investment and Cooperation Between Yugoslav and Foreign Enterprises, by Dj. Prazic, 7 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp. 10-12.  
JPRS 44,286

Bank Guarantees, by S. Rakocevic, 7 pp.  
SERBO-CROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Belgrade, Oct 67, pp. 14-17.  
JPRS 44,283

Poll of Yugoslav Citizens on their Reactions to the Economic Reform, by Mladen Habjanic, 9 pp.  
SERBO-CROATIAN, weekly newspaper, Vjesnik u Srijedu, Zagreb, 3 Jan 68, p. 3.  
JPRS 44,219

Political

Shehu Speech on Skanderbeg Anniversary, by Mehmet Shehu, 18 pp.  
ALBANIAN, newspaper, Zeri i Popullit, 17 Jan 68, pp. 1-3.  
JPRS 44,247

National Nihilism--a Favorable Condition for Imperialist Ideological Subversion, by Docent G. Tsonkov, 9 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 40-46.  
JPRS 44089

Some Aspects of the Collapse of Colonialism, by Todor Poibrenski, 15 pp.  
BULGARIAN, per, Filosofska Misul, Sofia, Vol. XXIII, No. 5, (Sept-Oct.), 1967, pp. 43-54.  
JPRS 44,381

The State and Alienation, by Vasil Zakhariev, 11 pp.  
BULGARIAN, per, Filosofska Misul, Sofia, Vol. XXIII, No. 5 (Sept-Oct.), 1967, pp. 55-63.  
JPRS 44,381

Methods of Development of a Scientific World Outlook in Young People, by Mariya Georgieva, 5 pp.  
BULGARIAN, per, Partien Zhivot, Sofia, No. 18, Dec 67, pp. 17-19.  
JPRS 44,381

Collectivity and Personal Responsibility, by Kiril Ivanov, 13 pp.  
BULGARIAN, per, Partien Zhivot, Sofia, No. 18, Dec 67, pp. 47-56.  
JPRS 44,381

Concerning Systematic and Effective Atheistic Propaganda, by M. Dimitrov, 12 pp.  
BULGARIAN, per, Politicheska Prosveta, Sofia, No. 11, Nov 67, pp. 20-27.  
JPRS 44,231

Limits on the Use of Force in Present International Relations, by Josef Pokstefl, 15 pp.  
CZECH, per, Mezinarodni Vztahy, Vol 2, No 3, Sep 1967, pp 12-21.  
JPRS 44089

Law Concerning the Capital City of Prague, 10 pp.  
CZECH, per, Sbirka Zakonu, Part 42, 12 Dec 1967, pp 410-414.  
JPRS 44089

Law on Elections to the National Assembly, 20 pp.  
CZECH, gazette, Sbirka Zakonu CSSR, No. 43, Prague, 13 Dec 67, pp. 418-425.  
JPRS 44,231

Law on Elections to the National Committees, 23 pp.  
CZECH, gazette, Sbirka Zakonu CSSR, No. 43, Prague, 13 Dec 67, pp. 426-433.  
JPRS 44,231

German Democratic Republic Penal Code of 12 Jan 68, 103 pp.  
GERMAN, per, Gesetzblatt der Deutschen Demokratischen Republik, East Berlin, Part I, No 1, 22 Jan 68, pp. 1-48.  
JPRS 44,384

German Communist View of the October Revolution, by Max Reiman, 8 pp.  
GERMAN, per, Wissen und Tat, No. 11/12, Nov/Dec 67, pp. 2-6.  
JPRS 44,314

Rumania Prepares newer Measures for the Suppression of Hungarians in Transylvania, by Peter Kobanyai, 5 pp.  
HUNGARIAN, per, Uj Hungaria, 15 Dec 1967, p 3.  
JPRS 44089

New Opportunities in the Patriotic People's Front Movement, by Gyula Kallai, 8 pp.  
HUNGARIAN, per, Partelet, No. 1, Budapest, Jan 68, pp. 3-8.  
JPRS 44,231

Tirana Publicizes Polish Party Pamphlet, 36 pp.  
POLISH, pamphlet, Communist Party of Poland Central Committee, Tirana, 2130GMT, 23, 25-30 Dec 67.  
JPRS 44,324

The Concept of the Nation Under Socialism:  
(1) The Concept of the Nation, by A. Gavrilă, 18 pp.  
RUMANIAN, per, Analele Institutului de Studii Istorice si Social-Politice de pe Linga CC al PCR, No. 6, Bucharest, Nov-Dec 67, pp. 40-53.  
JPRS 44,357

The Concept of the Nation Under Socialism:  
(2) Common Characteristics of a Nation, by M. Marian, 19 pp.  
RUMANIAN, per, Analele Institutului de Studii Istorice si Social-Politice de pe Linga CC al PCR, No. 6, Bucharest, Nov-Dec 67, pp. 54-65.  
JPRS 44,381

Eastern Europe  
Political (Contd)

Speech of Edvard Kardelj at Central Committee Session Marking the 30th Anniversary of Tito's Accession to the Party Leadership, by Edvard Kardelj, 32 pp.  
SERBO-CROATIAN, broadcast, 28 Dec 1967.  
JPRS 44089

The State and the Party under Socialism, by Predrag Vranicki, 9 pp.  
SERBO-CROATIAN, per, Praxis, No 5-6, Sep-Dec 1967, pp 643-650.  
JPRS 44089

Social Self-Administration and the Socialist Community, by Svetozar Stojanovic, 14 pp.  
SERBO-CROATIAN, per, Praxis, No 5-6, Sep-Dec 1967, pp 680-692.  
JPRS 44089

The Law on Travel Documents of Yugoslav Citizens, 12 pp.  
SERBO-CROATIAN, official gazette, Sluzbeni List SFRJ, No. 53, Belgrade, 27 Dec 67, pp. 1269-1273.  
JPRS 44,357

Czechoslovak Variety of Socialism, by Milan Hubl, 5 pp.  
SLOVAK, per, Kulturny Zivot, Bratislava, No. 1, 5 Jan 68, p. 3.  
JPRS 44,274

Military

Low Altitude Aerial Reconnaissance, by Sp. Spasov, 6 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 105-108.  
JPRS 44097

The Training of Chemical Warfare Squads, by Khr. Kostov, 8 pp.  
BULGARIAN, per, Armeyski Pregled, No 11, Nov 1967, pp 52-56.  
JPRS 44097

Nuclear Demolition Bombs in the Barrier System.  
BULGARIAN, per, Armeyski Pregled, No 11, 1967, pp 122-126.  
\*ACSI J-4361  
ID 2204006268

Eastern Europe  
Military (Contd)

Anti-Tank Weapons, By E. Hill, V. Kadanka, 217 pp.  
CZECH, bk, Protitankove Zbrane, 1961.  
ACSI J-3513  
ID 2213036564

ASW Specialist - Part II, by Rolf Muller, Manfred Adam, 58 pp.  
GERMAN, per, 1966. P500018868-V  
Dept of Navy/NIC Tr No 2486

Modern Development in Ballistic Measurements, by S. Kukler, J. H. DeBruine.  
GERMAN/FRENCH, Einige Neue Ballistische Messgerate, Commissie Van Proefneming Handleiding Deel XA Hoofdstuk, 22-1b, RvR 194/67.11, pp 157-175, 185-186; 377-378; 3-4.  
\*ACSI J-4438  
ID 2204003668

Characteristic Principles of the Automation of Infantry Weapons, by H. Knoppler, 15 pp.  
GERMAN, per, E. German Militaertechnik Magazine, No 67-1.  
ACSI J-2709  
ID 2204025767

Does the Armored Unit Need an Observation Tank?, by J. Jung.  
GERMAN, per, Kampftruppen, No 5, Oct 1967, pp 134-137.  
ACSI J-3997  
ID 2204060867

Self-Propelled 90MM Antitank Gun, by M. Wasik.  
GERMAN, per, Kampftruppen, No 5, Oct 1967, pp 140-141.  
ACSI J-3997  
ID 2204060867

The Development of the Soviet Standard Battle Tanks -- Part III Conclusion: Battle Tanks of Today, 9 pp.  
GERMAN, per, Militartechnik, No 3, 1967, pp 103-107.  
ACSI J-4039  
ID 2204062267

The Mine Technician, by Rolf Muller, Manfred Adam, 86 pp.  
GERMAN, per, Sperrgast, 1966. P500019868-V  
Dept of Navy/NIC Tr No 2486(A)



Eastern Europe  
Military (Contd)

Cooperation in the Field of the Development of  
Tactical Missiles, 5 pp.  
GERMAN, per, Wehr und Wirtschaft, No 6, 1967,  
pp 342-344.  
ACSI J-4030  
ID 2204061367

Mechanized Infantry Squad (MICV) Mechanized  
Infantry Combat Vehicle, 210 pp.  
GERMAN, bk, Die Panzergrenadiergruppe (SPZ),  
Oct 1966.  
ACSI J-3669  
ID 2204052367

Soviet Occupation Zone - Military/Army Infor-  
mation on Tank Model T-54 B and C.  
GERMAN, Z-K 52842 SBZ: Mil-H/Angaben zu PZ T-54  
B and C, 25 Nov 1966.  
\*ACSI J-4164  
ID 2218680667

Emergency Personnel Decontamination Station  
Established, by Ferenc Skrobak, 6 pp.  
HUNGARIAN, per, Polgari Vedelem, Supplement, 25  
Nov 1967, pp 6-7.  
JPRS 44097

Public Responsibility for Defense of Poland,  
54 pp.  
POLISH, official publication, Dziennik  
Ustaw, No. 44, Warsaw, 29 Nov 67, pp. 339-  
358.  
JPRS 44,359

Hermetic Sealing as a Means for Mothballing Com-  
bat Vehicles, by M. Debicki, 8 pp.  
POLISH, bk, Konservacja Wozow Bojowych Metoda  
Hermetyzacji, 1966, pp 182-190.  
ACSI J-4001  
ID 2878044766

Simultaneous Attack, 2 pp.  
POLISH, per, Zolniers Polski, No 41, 1967, pp 8-  
9.  
ACSI J-4042  
ID 2204062567

Phantom in Uniform, by May Ontoni Kolacinski.  
POLISH, bk, Zolniers Wolnosci, Dec 1967, pp 22-26.  
\*ACSI J-4409  
ID 2204007268

Eastern Europe  
Military (Contd)

Materiel Handbook for ABC Defense Instruction  
in the Troops, 141 pp.  
CROATIAN, handbk, 1960, pp 1-181.  
P500032668-V  
Dept of Navy/NIC Trans No 2517

Material Handbook for ABC Defense Instruction in  
the Troop.  
CROATIAN, bk, Directorate of Atomic, Biological  
and Chemical Defense of the Yugoslavian Peoples  
Army.  
Dept of Navy NIC 2517

The Basic Concepts of Yugoslav National  
Defense in Case of War, 9 pp.  
SERBO-CROATIAN, per, Narodna Armija,  
Belgrade, 1 Dec 67, p. 3.  
JPRS 44,242

Sociological

Literary and Artistic Works Lacking in Profound  
Ideological Interpretation, by Abdurrahim  
Kyftiu, 12 pp.  
ALBANIAN, per, Drita, Tirana, 12 Nov 67, pp. 1-2.  
JPRS 44,218

Regulation Governing the Tasks, Organization,  
and Activity of Voluntary Fire Brigades  
(DPO's) in Bulgaria, by D. Dikov, 9 pp.  
BULGARIAN, per, Durzhaven Vestnik, Sofia,  
No. 101, 26 Dec 67, pp. 1-3.  
JPRS 44,273

New Curriculums for Polytechnical Education,  
10 pp.  
GERMAN, per, SBZ, Cologne, 1 Nov 67,  
pp. 332-334.  
JPRS 44,284

The Possibilities of Education and Continued  
Professional Training for Packaging in the GDR,  
by J. Schubert.  
GERMAN, per, Die Verpackung, No 6, 1967,  
pp 182-185  
\*ACSI J-4320  
ID 2204004568

Eastern Europe  
Sociological (Contd)

The Weaving Picture in the Manesse Manuscript, and its Alleged Subject, by Richard Stettiner. GERMAN, bk, Das webbild in der manesse-handschrift und seine angebliche vorlage. Verlag von W. Spemann in Berlin und Stuttgart, 1911, 33 pp.  
\*CSFTI TT 68-50350

Interview With Czechoslovak Writer Ludvik Vaculik, by Otto Griese, 5 pp.  
GERMAN, per, Die Zeit, Hamburg, 19 Jan 68, pp. 9 and 10.  
JPRS 44,274

Decree on the Organization and Functions of the Hungarian Chamber of Commerce, 9 pp.  
HUNGARIAN, official publication, Magyar Kozlony, No. 100, Budapest 23 Dec 67, pp. 1057-1060.  
JPRS 44,219

National Feeling, National Pride, and Socialist Patriotism, by Daniel Csatari, 14 pp.  
HUNGARIAN, per, Tarsadalmi Szemle, Budapest, No. 12, Dec 67, pp. 45-57.  
JPRS 44,206

Psychosociological Problems of Work in the Fisherman's Occupation, by Aurelia Polanska. POLISH, per, Prace Morskiego Inst Rybackiego, Vol 13, Ser C, 1964, pp 7-31.  
CFSTI TT 66-57060

Law on Employee's Holidays, 11 pp.  
RUMANIAN, per, Buletinul Oficial al Republicii Socialiste Romania, Bucharest, Part I, No. 113, 28 Dec 67, pp. 4-8.  
JPRS 44,304

Literature Under Socialism, by Sveta Lukic, 32 pp.  
SERBO-CROATIAN, journal, Encyclopaedia Moderna, No. 5-6, Zagreb, Sept-Dec, 1967, pp. 16-27.  
JPRS 44,206

The Moral Educational Function of the School and Its Place in Society, by Ante Vukasovic, 35 pp.  
SERBO-CROATIAN, journal, Encyclopaedia Moderna, No. 5-6, Zagreb, Sept-Dec 1967, pp. 282-295.  
JPRS 44,206

WESTERN EUROPE

Economic

Defense Budget for Calendar Year 1968. FINNISH, rpt, 26 Feb 1968.  
DIA 2 831 0050 68

Extension of Exclusive Fishing Rights. FRENCH, rpt, Nov-Dec 1967.  
DIA 5 832 0084 68

Budget 1968 de la Protection Civile, by M. Edouard Charret.  
FRENCH, per, Protection Civile et Securite Industrielle, No 160, Dec 1967, pp 8-17.  
\*ACSI J-4333  
ID 2204005568

The Flexible Bag -- A Simple and Economical Solution to the Problem of Storing Fruit Juices, 2 pp.  
FRENCH, per, Revue Technique et Economique de L'Industrie Alimentaire, No 146, 1967, p 77.  
ACSI J-4041  
ID 2204062467

Evolution of Techniques for the Packaging of Liquids in Spain, by L. S. Canut.  
SPANISH, per, IDE (Informacion de Envaso) Embalaje y Artes Graficas Aplicadas, No 101, Jan 1968, pp 14-18.  
\*ACSI J-4407  
ID 2204007068

The Relationship Between Electronic Data Processing Production Equipment and Personnel in the Future Steel Industry - An Example of Application, by E. Berg.  
SWEDISH, per, Jernkon. Ann., Vol 148, No 9, 1964, pp 649-658.  
BISI 5773

Western Europe  
Political

Danish Marxist-Leninists to Support Leftist Socialists, 5 pp.  
DANISH, monthly, Kommunistisk Orientering, Copenhagen, No. 1, 4 Jan 68, pp. 2-4.  
JPRS 44,398

The French CP and Contemporary Problems, by Waldeck Rochet, 24 pp.  
FRENCH, weekly, France Nouvelle, No. 1161, Paris, 17 Jan 68, Special Suppl., pp. 1-16.  
JPRS 44,398

Communist Analyze the Cause of the "Tragedy", 6 pp.  
FRENCH, np, L'Humanite, 9 Dec 1967, p 2, 11 Dec 1967, p 3.  
JPRS 44085

French Marxist-Leninists Criticize Revisionists, by Jacques Jurquet, 9 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 3, No. 82, 28 Dec 67, pp. 8 and 9.  
JPRS 44,226

French Debate on Socialism Continues, by Marcel Veyrier, 5 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 4, No. 85, Paris, pp. 1 and 4.  
JPRS 44,398

Statutes of the Marxist-Leninist CP of France, 14 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol 4, No. 85, Paris, 18 Jan 68, pp. 6 and 7.  
JPRS 44,398

French Debate on Socialism Continues, by Raymond Casas, 6 pp.  
FRENCH, weekly, L'Humanite Nouvelle, Vol. 4, No. 85, 18 Jan 68, p. 16.  
JPRS 44,398

Pro-Chinese Belgian Communist Party Denounces Sidney Rittenberg, 217 pp.  
FRENCH, weekly, La Voix du Peuple, Brussels, 10 Nov 67, pp. 9-16; 17 Nov 67, pp. 9-12; 1 Dec 67, pp. 9-12; 8 Dec 67, pp. 9-12; 15 Dec 67, pp. 9-12; 22 Dec 67, pp. 9-12; and 29 Dec 67, pp. 9-12.  
JPRS 44,204

Western Europe  
Political (Contd)

Austrian Says Revolutionary Struggle Only Solution, by F. St., 5 pp.  
GERMAN, semimonthly, Rote Fahne, No. 90, Vienna, 1 Jan 68, pp. 6-8.  
JPRS 44,398

GCR Preparing for Eleventh National Congress, 25 pp.  
ITALIAN, bimonthly per., Bandiera Rossa, No. 1, Rome, 1 Jan 68, pp. 1-4.  
JPRS 44,314

Constitution of the Federation of Marxist-Leninist Communists of Italy, 11 pp.  
ITALIAN, monthly, Rivoluzione Proletaria, No. 10, Milan, Oct 67, pp. 5-15.  
JPRS 44,226

Political Line of Federation of Italian Marxist-Leninists, 7 pp  
ITALIAN, monthly, Rivoluzione Proletaria, Milan, Vol II, No. 12, Dec 67, pp. 1 and 12.  
JPRS 44,226

Italian Theories on Exploitation of Working Class, by Margaret Ellingham, 7 pp.  
ITALIAN, monthly, Rivoluzione Proletaria, Milan, Vol II, No. 12, Dec 67, pp. 5 and 12.  
JPRS 44,226

Military

ABC Defense Problems in the Development and Operation in Covered and Open Vehicles, by A. Koozy.  
GERMAN, Mar 1967.  
ACSI J-3043  
ID 2832030566

Air Cushion Tent, 3 pp.  
GERMAN.  
\*ACSI J-4246  
ID 2834013466

The French Battle Tank AMX-30.  
GERMAN, per, Truppendienst, 1967, pp 420-422.  
\*ACSI J-4323  
ID 2204004868

Western Europe  
Military (Contd)

Description of Torpedo and Mine Transport Installation - DRAGEN Class Submarine, 56 pp. SWEDISH, rpt, Beskrivning Torped-Och Mintransport - Ubatar Typ Draken, Document No SU 3788/62, 9 Jan 1963. P500025568-V  
Dept of Navy/NIC Trans No 2510

Sociological

The Demographic Factor of Social Organization of the Bantu, by E. H. Sonnabend. ITALIAN, bk, Il fattore demografico nell'organizzazione sociale dei bantu. Comitato Italiano per lo studio dei problemi della popolazione Serie I. Arti Grafiche Zamperini and Lorenzi. Roma MCMXXXV - XIV., Vol III, 1935, 398 pp.  
\*CSFTI TT 68-50347

Biographic

Miscellaneous Ichthyological Papers Dedicated in Memory of Achille Valenciennes (1784-1865). FRENCH, bk, Institut Francais d'Afrique Noir, Memoires, Dakar, No 68, 1963, 486 pp.  
\*CSFTI TT 68-50076

AFRICA

Economic

Discussion of Congo(Kinshasa) Fiscal Ordinance Laws, 6 pp. FRENCH, newspaper, Le Courrier d'Afrique, Kinshasa, 11 Jan 68, p. 2.  
JPRS 44,382

Economic Development Program for Great Kabylia, 5 pp. FRENCH, newspaper, El Moudjahid, Algiers, 3 Jan 68, pp. 1 and 3.  
JPRS 44,220

Africa  
Economic (Contd)

Algeria to Improve Fertilizer Situation, 8 pp. FRENCH, newspaper, El Moudjahid, Algiers, 5 Jan 68, pp. 1,3; and 7-8 Jan 68, pp. 1,3.  
JPRS 44,207

Budget Reflects Development Planning, by Saifoulaye Diallo, 9 pp. FRENCH, newspaper, Horoya, Conakry, 19 Jan 68, pp. 1, 3, 4.  
JPRS 44,401

Continuous Economic Growth in Togo, 5 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 320, 16 Nov 67, pp. 6,8.  
JPRS 44,401

1968 Budget and Exploitation of Tambao Mineral Deposits, 7 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 326, 27 Dec 67, pp. 4, 6.  
JPRS 44,220

Malagasy Economy and Trade Balance Improving, 6 pp. FRENCH, per, Le Moniteur Africain, Dakar, No. 326, 27 Dec 67, pp. 5 and 8.  
JPRS 44,382

Government Reviews 1968 Sao Tome Budget, by Governor Silva Sebastiao, 9 pp. PORTUGUESE, newspaper, A Voz de Sao Tome, Sao Tome 16 Dec 67, pp. 1, 3, 4.  
JPRS 44,382

Development of Agricultural Cooperatives in Mali, 7 pp. GERMAN, per, Die Wirtschaft, East Berlin, 3 Jan 68, pp. 28 and 29.  
JPRS 44,382

Political

Various Decrees Issued in Burundi, 19 pp. FRENCH, monthly government publ., Bulletin Officiel du Burundi, Bujumbura, Vol 6, Nos. 10 and 11, Oct-Nov 67, pp. 385-387, 389, 401-405, 411.  
JPRS 44,382

Africa  
Sociological

Cult Among the Toussian of Upper Volta, by J. Hebert and M. Guilhem, 65 pp.  
FRENCH, publication, Anthropos, Freiburg, Switzerland, Vol 62, No. 1-2, 1967, pp. 139-164.  
JPRS 44,401

Rehabilitation of Delinquent Youth, by Alidor Tshimbayi and Joseph Lefebvre, 5 pp.  
FRENCH, publication, Congo-Afrique -- Economie, Culture, Vie Sociale, Kinshasa, Vol. 7, No. 19, Nov 67, pp. 465-468.  
JPRS 44,207

The Psychology of Negritude, by Valentin Y. Mudimbe, 16 pp.  
FRENCH, per, Etudes Congolaises, Vol 10, No. 5, Brussels, Sept-Oct 67, pp. 1-13.  
JPRS 44,220

Spanish Guinea's Decolonization Problems, Solutions Reviewed, by Luis Beltran, 12 pp.  
FRENCH, per, Etudes Congolaises, Vol 10, No 5, Brussels, Sept-Oct, 67, pp. 45-56.  
JPRS 44,220

Cultural and Agricultural Development, by Sekou Toure, 17 pp.  
FRENCH, newspaper, Horoya, Conakry, 27 Dec 67, pp. 1-3; 28 Dec 67, pp. 1,2; and 29 Dec 67, pp. 1-3.  
JPRS 44,207

Toure Sends Message to Dakar Party Congress, by Ahmed Sekou Toure, 7 pp.  
FRENCH, daily, Horoya, 7-8 Jan 68, pp. 1-3.  
JPRS 44,220

The Algerian Housing Situation, by Hadj B., 5 pp.  
FRENCH, newspaper, El Moudjahid, Algiers, 9 Jan 68, pp. 1,3.  
JPRS 44,207

Africa  
Sociological (Contd)

The Chief of the Clan and Family Rights in the Customs of Lower Dahomey, by Adrien Houngbedji, 20 pp.  
FRENCH, per, Revue Juridique et Politique, Vol. 21, No. 4, Paris, Oct-Dec 67, pp. 603-624.  
JPRS 44,220

Problems of Matadi in Congo-Kinshasa, by Elie Nkwata, 8 pp.  
FRENCH, daily newspaper, La Tribune, Kinshasa, 3 Nov 67, pp. 1,2; 4 Nov 67, p. 4; 5-6 Nov 67, p. 3; 7 Nov 67, p. 3; and 8 Nov 67, p. 3.  
JPRS 44,401

MIDDLE EAST

Economic

Iraqi Oil Minister Discusses New Program, 5 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, p. 6.  
JPRS 44,371

Government Oil Agencies in Iraq, 17 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, pp. 8-9.  
JPRS 44,371

The Oil Refining Industry in Iraq, 5 pp.  
ARABIC, daily, al Ahram, Cairo, 25 Nov 67, p. 10.  
JPRS 44,371

The War Economy, by Isma'il Sabri 'Abdullah, 21 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 26 Dec 67, p. 5; 27 Dec 67, p. 5; 28 Dec 67, p. 5; 29 Dec 67, p. 7.  
JPRS 44,245

Middle East  
Economic (Contd)

The Economics of War and Strengthening of Industrial Production, 19 pp.  
ARABIC, per, al-Ahram al-Iqtisadi, Cairo, 1 Jan 68, pp. 34-43.  
JPRS 44,329

Surplus of Manpower and Emigration of Workers from Egypt, by Raja Abd-al-Malak, 7 pp.  
ARABIC, newspaper, Al-Akhbar, Cairo, 8 Jan 68, p. 3.  
JPRS 44,329

Developing a System for Monetary Supervision, by 'Adel Hafez Ghanem, 8 pp.  
ARABIC, per, Al-'Amn Al-'Amm, Jan 1968, pp 61-66.  
JPRS 44086

Iraq's Five-Year Economic Plan, 7 pp.  
ARABIC, newspaper, al-Jumhuriyyah, Cairo, 27 Jan 68, pp. 20-21.  
JPRS 44,329

The Two Sides of West Bank Industry, by Aron Bacher, 5 pp.  
HEBREW, per, Bamahane, Tel Aviv, 2 Jan 68, p. 23.  
JPRS 44,212

Monthly Review of the Ministry of Labour, Israel.  
HEBREW, per, Review of the Ministry of Labour, Israel, 1968, 450 pp.  
\*CSFTI TT 68-50303/1-12

Political

Arab National Council Advocated for Armed Liberation of Palestine, by Ihsan Sakr, 6 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 11 Jan 68, p. 5.  
JPRS 44,325

Clarifying Distortions and Falsifications Contained in Nidhal Al-Sha's Article, 12 pp.  
ARABIC, newspaper, Ila al-Aman, Beirut, 14 Jan 68, p. 3.  
JPRS 44,329

Middle East  
Political (Contd)

Growth and Development of Security Departments in Canal Zone, by Ibrahim Al-Fahham, 11 pp.  
ARABIC, per, Al-'Amn Al-'Amm, No 40, 1968, pp 47-54.  
JPRS 44086

New Sytle of Egyptian Diplomacy, by Mahmoud Thuhni, 6 pp.  
ARABIC, per, Rose al-Yusuf, 25 Dec 1967, pp 4-5.  
JPRS 44068

Role of Arab Intelligentsia on the Palestine Question, 6 pp.  
ARABIC, per, Ath-Thawrah, Damascus, 11 Jan 1968, p. 3.  
JPRS 44,329

Center-EDA Cooperation in Municipal Elections, 6 pp.  
GREEK, newspaper, To Vima, Athens, 10 Jan 68, pp. 1,7.  
JPRS 44,245

Military Rule in Shekham (Nablus), 11 pp.  
HEBREW, per, Haarets, 15 Dec 1967, pp 6, 7, 10.  
JPRS 44086

An East German Communist in Solidarity With the ICP, 5 pp.  
HEBREW, daily, Kol Ha'am, Tel Aviv, 29 Dec 67, pp. 2 and 5.  
JPRS 44,212

Problems of Attaining Peace With Neighboring Countries, by Ruth Lubitch, 7 pp.  
HEBREW, newspaper, Zo Haderekh, Tel Aviv, 27 Dec 67, pp. 4 and 7.  
JPRS 44,245

Military

Military Matters to be Subject of Yemen Defense Minister U.A.R. Visit, by Ahmad Nafi', 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 10 Jan 68, p. 5.  
JPRS 44,325

Middle East  
Military (Contd)

A Profile of General Rabin, by Benjamin Landau,  
6 pp.  
HEBREW, np, Bamahane, Tel Aviv, 2 Jan 68,  
pp. 6 and 7.  
JPRS 44,212

An Interview With General Chaim Bar-Lev,  
9 pp.  
HEBREW, per, Bamahane, Tel Aviv, 2 Jan 68, pp.  
10 and 11.  
JPRS 44,212

Achievements of the Israeli Ordnance Corps,  
by Benjamin Landau, 6 pp.  
HEBREW, weekly, Bamahaneh, Tel Aviv,  
9 Jan 68, pp. 8 and 9.  
JPRS 44,325

Prolongation of Military Service in Israel,  
by Yosef Eshkol, 8 pp.  
HEBREW, weekly, Bamahaneh, 16 Jan 68, pp.  
6-7.  
JPRS 44,325

The Meaning of Military Discipline, by M. Piyl,  
6 pp.  
HEBREW, per, Maarakhot, Nov 1967, pp 5-8.  
JPRS 44086

Parachute Training in the IDF, by Rafal, 8 pp.  
HEBREW, per, Maarakhot, Nov 1967, pp 9-12.  
JPRS 44086

Geographic

Contemporary Iraq.  
RUSSIAN, bk, Sovremennyy Irak, 1966, 175 pp.  
\*ACSI J-3847  
ID 2204056667

Middle East  
Sociological

A Survey of Graduates of Schools of Commerce,  
12 pp.  
ARABIC, per, al-Ahram al-Iotisadi, Cairo,  
1 Jan 68, pp. 28-34.  
JPRS 44,245

Reporting Crimes Committed Against State  
Security, by Salah Nassar, 7 pp.  
ARABIC, per, Al-'Amm Al-'Amm, No 40, Jan 1967,  
pp-55-60.  
JPRS 44086

A Comparative Study of Crime in Cairo, by Mahmoud  
al Siba'i, 15 pp.  
ARABIC, per, Al-'Amm Al-'Amm, Jan 1968, pp 149-161.  
JPRS 44086

Jeune Afrique Interviews French Author on Arab  
Intellectuals, 7 pp.  
FRENCH, per, Jeune Afrique, 24 Dec 1967, pp 44-  
46.  
JPRS 44086

Selected Bibliography of Israel Educational  
Materials.  
HEBREW, per, Selected Bibliography of Israel  
Educational Materials, Vol 3, Nos 1-3, 1968.  
\*CSFTI TT 68-50446/1-3

FAR EAST

Economic

Raising Capital for Village Dispensaries, by  
Do Trung Dam, 6 pp.  
VIETNAMESE, per, Duoc-hoc, No. 11, Hanoi,  
Nov 67, pp. 2-4.  
JPRS 44,228

Train and Improve Scientific-Technological  
and Economic Management Cadre, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 1-5.  
JPRS 44,391

Far East  
Economic (Contd)

Science and Technology Must Serve Local Industry, by Doan Dinh Hoe, 16 pp.  
VIETNAMESE, per, Tin-tuc Hoat-dong Khoa-hoc, Hanoi, No. 10, Oct 67, pp. 8-15.  
JPRS 44,198

Political

Literature and Art Unit Bombards China's Khrushchev, 9 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, No 12, 10 Aug 1967.  
JPRS 44241

Lo Jui-ch'ing's Evil Doings in Literature and Art, 7 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, No 12, 10 Aug 1967.  
JPRS 44241

Lu Ting'i's Work in Literature and Art Attacked, 5 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, Nos 13 & 14, 10 Sept 1967.  
JPRS 44241

T'ao Chu Accused of Attempting to Seize Power in the Arts, 6 pp.  
CHINESE, per, Chieh-fang-chun Wen-i, Nos 13 & 14, 10 Sept 1967.  
JPRS 44241

Chou Attacks '16 May' Group, 6 pp.  
CHINESE, np, Chu-ying Tung-fang Hung, 1 Oct 1967.  
JPRS 44241

The Indonesian Government Under Fascist Rule, 5 pp.  
CHINESE, per, Chung-kuo Hsin-wen, 3 Nov 1967, pp 8-9.  
JPRS 44085

Far East  
Political (Contd)

Struggle for Seizure of Power in Army in Tibet, 6 pp.  
CHINESE, journal, Hung-t'ichun Chan-pao, No. 5, Lhasa, 8 Sept 67, pp. 1-6.  
JPRS 44,278

October Revolution Commemorated, 10 pp.  
CHINESE, np, Jen-min Jih-pao, 5 Nov 1967.  
JPRS 44241

China's Khrushchev Repudiated, 8 pp.  
CHINESE, np, Jen-min Jih-pao, 18 Nov 1967.  
JPRS 44241

The Two-Road Struggle in the Countryside, 17 pp.  
CHINESE, np, Jen-min Jih-pao, 23 Nov 1967.  
JPRS 44241

Chou Urges Kwangtung Factions to Unite, 7 pp.  
CHINESE, per, Kung-nung-ping Chan-pao, No 18, 14 Nov 1967.  
JPRS 44241

Great Alliances Meet with Resistance in Canton, 6 pp.  
CHINESE, per, T'i-yu Chan-pao, No 13, 30 Oct 1967.  
JPRS 44241

The 'Counterrevolutionary' Wuhan Coup, 16 pp.  
CHINESE, per, Wu-han Kang-erh-szu, No 38, 22 Aug 1967.  
JPRS 44241

Indonesia, the Sleeping Volcano, by Jacques Decornoy, 20 pp.  
FRENCH, per, Le Monde, 1 Dec 1967, pp 1-2; 2 Dec 1967, pp 2; 3-4 Dec 1967, p 4; 5 Dec 1967, p 2; and 6 Dec 1967, p 2.  
JPRS 44085

Martin Kuester Reports on Vietnam, by Lt. Commander Martin Kuester, 22 pp..  
GERMAN, per, Volksarmee, East Berlin, Nos 46-51, 20 and 27 Nov 67, and 4, 11 and 18 Dec 67.  
JPRS 44,238



Far East  
Political (Contd)

Comrade Kim Il-Song's Great 10-Point Political Program, 17 pp.  
KOREAN, newspaper, Nodong Sinmun, P'yongyang, 18 Dec 67, p. 2.  
JPRS 44,225

Prepare for Unification of the Fatherland, 9 pp.  
KOREAN, newspaper, Nodong Sinmun, P'yongyang, 23 Dec 67, p. 1.  
JPRS 44,255

Let Us Follow the Example of the October Revolution, Develop Revolutionary Heroism, and Be Determined to Fight and Defeat the U.S. Aggressors, 9 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 1-6.  
JPRS 44,225

The Great October Revolution Shows the People the Road to Liberation, by Ho Chi Minh, 8 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 10-18.  
JPRS 44,225

Forward Under the Glorious Banner of the October Revolution, by Le Duan, 27 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 19-41.  
JPRS 44,225

Speech by Truong Chinh at 4 November Hanoi Ceremony Commemorating 50th Anniversary of October Revolution, by Truong Chinh, 23 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 42-60.  
JPRS 44,225

Pham Van Dong Speech at 7 November Reception Given by Soviet Ambassador Shcherbakov, by Pham Van Dong, 9 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 61-68.  
JPRS 44,225

Far East  
Political (Contd)

Let Us Resolutely Take the Road of the October Revolution, by Le Thanh Nghi, 14 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 11, Nov 67, pp. 69-80.  
JPRS 44,225

The Great Achievements of the Soviet People During 50 Years of Building Socialism and Communism, by Nguyen Tho Chan, 10 pp.  
VIETNAMESE, per, Hoc Tap, No. 11, Hanoi, Nov 67, pp. 81-87.  
JPRS 44,225

We are Endeavoring to Effectively Implement the Lines and Policies of the Party Central Committee in the Concrete Conditions of Hung Yen, by Le Quy Quynh, 18 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 41-53.  
JPRS 44,391

Strengthening the District Echelon and Building a "Four Good" District Committee, by Le Van Lanh, 9 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 54-60.  
JPRS 44,391

Internal Unity is the Key to Progress in the Movement in Dong Trieu District, by Nguyen Thanh Nam, 7 pp.  
VIETNAMESE, per, Hoc Tap, No. 12, Hanoi, Dec 67, pp. 63-67.  
JPRS 44,391

Strengthening Leadership and Organizing Achievement Guidance in the District Committees, by Hoang Le, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 67-71.  
JPRS 44,391

A Great Pride and a Strong Source of Stimulation, 5 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 72-75.  
JPRS 44,391

Far East  
Political (Contd)

The Spirit of the Kwangchow Commune's  
Armed Forces Will Never Die, by Tran Huy  
Lieu, 7 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 76-80.  
JPRS 44,391

Nhan Dan Holds a Forum With Hanoi Workers,  
9 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
17 Dec 67, p.2.  
JPRS 44,400

The Air Defense Forces and People's Air  
Force Are Determined to Shoot Down Many  
American Aircraft, 7 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
31 Dec 67, p. 3.  
JPRS 44,289

Important Developments of the American Move-  
ment Against the War of Aggression in Viet  
Nam, by Quang Thai, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
31 Dec 67, p. 4.  
JPRS 44,289

Raise the Revolutionary Banner of the Pro-  
letariat, by Nguyen Cong Hoa, 7 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi,  
3 Jan 68, p. 2.  
JPRS 44,228

One Year of Broad, Continuous, and Vigorous  
Struggle, by Quang Thai, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi,  
4 Jan 68, p. 3.  
JPRS 44,289

Do Everything to Completely Defeat the Aggressive  
U.S. Pirates, 5 pp.  
VIETNAMESE, newspaper, Quan Doi Nhan Dan,  
Hanoi, 19 Dec 67, pp. 1 and 4.  
JPRS 44,210

Plan for Study of Party Documents, 14 pp.  
VIETNAMESE, monthly per, Tuyen-huan, No. 11,  
Hanoi, Nov 67, pp. 1-7  
JPRS 44,217

Far East  
Political (Contd)

The October Revolution, 23 pp.  
VIETNAMESE, per, Tuyen-huan, No. 11, Hanoi,  
Nov 67, pp. 35-48.  
JPRS 44,217

Military

Develop the Proud Tradition of Our Army, by  
Lt Gen. Song Hao, 22 pp.  
VIETNAMESE, newspaper, Quan Doi Nhan Dan, Hanoi,  
19 Dec 67, pp. 1-3.  
JPRS 44,210

Specifications for Air Raid Defense Measures  
in the General Schools, 7 pp.  
VIETNAMESE, per, Tap San Giao Duc Cap I,  
Hanoi, No. 2, 1967-68, pp. 12-14.  
JPRS 44,210

Sociological

Overestimations of Farther Distance in Depth  
Perception, 15 pp.  
JAPANESE, per, Japanese Journal of Psychology,  
vol 27, 1965, pp 204-208.  
\*ACSI J-3958  
ID 2204060167

Achievements in Public Health, by Nguyen  
Thanh Nghi, 5 pp.  
VIETNAMESE, newspaper, Suc Khoe, No.75,  
Hanoi, 10 Dec 67, p. 1.  
JPRS 44,288

Progress of the Level II and Level III Schools  
During the Next Three Years, by Le Dai Ly,  
6 pp.  
Vietnamese, per, Tap San Giao Duc Cap II - III,  
No. 1, 67-68, pp. 5-8, 41.  
JPRS 44,210

Far East  
Sociological (Contd)

Directive on the 2-Year Plan for Building Up Level II and Level III General Schools, 16 pp.  
VIETNAMESE, per, Tap San Giao Duc Cap II-III, Hanoi, No. 8, 1966-1967, pp. 3-12.  
JPRS 44,289

Applying "Learning While Working" Program in Colleges, by Nguyen The Hung, 10 pp.  
VIETNAMESE, per, Tin-thuc Hoc-tong Khoa-Hoc, No. 10, Hanoi, Oct 67, pp. 3-7.  
JPRS 44,198

LATIN AMERICA

Economic

Josue de Castro Writes on Brazilian Economy, by Josue de Castro, 10 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 3, Nov-Dec, 1967, pp. 44-53.  
JPRS 44,406

Development of Cuban Commercial Shipping, 11 pp.  
POLISH, per, Technika i Gospodarka Morska, 1966, pp 290-292.  
ACSI J-3957  
ID 2204060067

Improvement Noted in Economy in 1967, 9 pp.  
PORTUGUESE, per, Jornal do Brasil, Rio de Janeiro, 31 Dec 67, Sect 1, p. 23.  
JPRS 44,237

New Highway an Economic Boon to Southwest Brazil, by Artur Almora, 7 pp.  
PORTUGUESE, newspaper, Jornal do Brasil, Rio de Janeiro, 14 Jan 68, p. 16.  
JPRS 44,328

New Gasoline-Rationing System Explained, 6 pp.  
SPANISH, newspaper, Granma, Havana, 3 Jan 68, p. 6.  
JPRS 44,306

Latin America  
Economic (Contd)

The Merin Lagoon Regional Project, by Eduardo Paysse Gonzalez, 6 pp.  
SPANISH, per, Marcha, Montevideo, 22 Dec 67, p. 8.  
JPRS 44246

Analysis of Chile's Economy in 1967, by Coriolano, 11 pp.  
SPANISH, per, PEC, Santiago de Chile, 19 Jan 68, pp. 4-5.  
JPRS 44,392

Economic Progress Reported in the Provinces, 10 pp.  
SPANISH, Vea, Santiago, 28 Sept 67, pp. 27-29.  
JPRS 44,246

Political

Bolivia Ripe for Guerrilla Warfare, 6 pp.  
ENGLISH, magazine, Tricontinental, No. 1, July-August 67, pp. 41-46.  
JPRS 44,406

Carlos Lechuga: Laos and US Imperialism, by Carlos Lechuga, 9 pp.  
ENGLISH, magazine, Tricontinental, No. 2, Havana, Sept-Oct. 67, pp. 41-53.  
JPRS 44,406

Profile of Brazilian Communist Carlos Mari-gheila, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 2, Sept.-Oct 67, pp. 155-162.  
JPRS 44,406

Jose Carlos Mariategui: Ethics and Socialism, by Jose Carlos Mariategui, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana, No. 3, Nov-Dec 67, pp. 20-27.  
JPRS 44,406

Impressions of a Witness at Debray's Trial, by Carlos Nunez, 11 pp.  
ENGLISH, magazine, Tricontinental, No. 3, Nov-Dec 67, pp. 28, 31-41.  
JPRS 44,406

Latin America  
Political (Contd)

The Guerrilla Struggle in Nicaragua, 9 pp.  
ENGLISH, magazine, Tricontinental, Havana,  
No. 3, Nov-Dec 67, pp. 113-122.  
JPRS 44,406

Hunger and Revolution in Latin America,  
by Carlos Rafael Rodriguez, 8 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 8-11.  
JPRS 44,306

Che's Death a Blow to Bolivia's Guerrilla War,  
by Livio Maitan and Sergio de Santis,  
16 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 18-21.  
JPRS 44,306

The Guerrilla Movement in Colombia, by  
Antonio Moscato, 14 pp.  
ITALIAN, per, La Sinistra, Rome, Nov-Dec 67,  
pp. 22-24.  
JPRS 44,306

First Months of New Administration Summarized,  
8 pp.  
PORTUGUESE, per, Jornal do Brasil, Rio de Janeiro,  
31 Dec 67, Sect. 1, p. 4.  
JPRS 44,237

Policy Resolution of Brazilian CP Sixth  
Congress, 16 pp.  
PORTUGUESE, journal, Jornal do Brasil, Rio  
de Janeiro, 31 Dec 67, Sect. 1, p. 16.  
JPRS 44,237

President Costa E Silva's State of the Nation  
Message, 14 pp.  
PORTUGUESE, journal, Jornal do Brasil, Rio de  
Janeiro, 31 Dec 67, Sect 1, pp. 3 and 24.  
JPRS 44,237

Cuban Extols Venezuelan Revolutionary, by  
Javier Rodriguez, 5 pp.  
SPANISH, per, Ehemia, Havana, 12 Jan 68,  
pp. 46-47.  
JPRS 44,306

Latin America  
Political (Contd)

The Story of a Revolutionary Couple, by  
Enrique Lopez Oliva, 7 pp.  
SPANISH, per, Cuba, Havana, Sept 67,  
pp. 38,39,40.  
JPRS 44,246

Lavandero Harshly Criticizes PDC Leadership,  
5 pp.  
SPANISH, per, El Diario Ilustrado, Santiago  
de Chile, 8 Jan 68, p. 2.  
JPRS 44,246

An Appraisal of Betancourt's Last Book,  
by Vitelio Reyes, 7 pp.  
SPANISH, per, Elite, Caracas, 13 Jan 68,  
pp. 43-45.  
JPRS 44,306

Political Parties Beset by Crisis in 1967,  
by Luis Hernandez Parker, 6 pp.  
SPANISH, per, Ercilla, Santiago de Chile,  
27 Dec 67, pp. 4-5.  
JPRS 44,246

Mysterious Letter from Ambassador Tomic, by  
Luis Hernandez Parker, 6 pp.  
SPANISH, per, Ercilla, Santiago de Chile,  
10 Jan 68, pp. 6-7.  
JPRS 44,246

A View of the Revolution on Its Ninth  
Anniversary, 6 pp.  
SPANISH, newspaper, Granma, Havana, 31 Dec 67,  
p. 2.  
JPRS 44,246

Gulf Oil's Geopolitical Dictatorship, by  
Rogelio Garcia Lupo, 8 pp.  
SPANISH, per, Marcha, Montevideo, 15 Dec 67,  
pp. 19,24.  
JPRS 44,246

Government-Church Clique Ousts Podesta,  
by Luis H. Decurges, 7 pp.  
SPANISH, per, Marcha, Montevideo, 15 Dec 67,  
pp. 20-21.  
JPRS 44,246

Brazilian Writer Advocates Third-World Approach,  
by Harold G. Escardo, 7 pp.  
SPANISH, per, Oiga, Lima, 12 Jan 68, pp. 11-13.  
JPRS 44,237

Latin America  
Political (Contd)

Peruvian Leftist Newspaperman Scores Premier, by Francisco Moncloa, 5 pp.  
SPANISH, per, Oiga, Lima, 12 Jan 68, pp 4 and 31.  
JPRS 44237

PDC Struggle Twelve Years Old, by Dr. Hector Cornejo Chavez, 7 pp.  
SPANISH, per, Oiga, Lima, 19 Jan 68, pp. 8-10.  
JPRS 44,392

Baltra, The Communist Candidate in Chile, 5 pp.  
SPANISH, per, PEC, Santiago de Chile, 22 Dec 67, pp. 7-8.  
JPRS 44,246

Communist Youth Leaders Visit Cuba, 5 pp.  
SPANISH, newspaper, El Popular, Montevideo, 23 Jan 67, p. 4.  
JPRS 44,306

Course Taken by Venezuelan CP Attacked, 32 pp.  
SPANISH, per, Punto Final, Santiago, Supplement, 2 Jan 68, pp. 1-16.  
JPRS 44,237

Cuba Blazes the Trail for America, by Jaime Faivovich, 6 pp.  
SPANISH, per, Punto Final, Santiago, 2 Jan 68, pp. 46,47.  
JPRS 44,306

Colombian Guerrilla Struggle Believed a Failure, by Christian Martinez, 9 pp.  
SPANISH, np, El Siglo, Bogota, 30 Dec 67, p. 2.  
JPRS 44,306

Socialist Party Congress in Chillan, by Aniceto Rodriguez, 5 pp.  
SPANISH, np, El Siglo, Santiago, 4 Jan 68, p. 7.  
JPRS 44,246

Appraisal of Venezuelan CP Aims and Activities, by Corso, 6 pp.  
SPANISH, newspaper, El Siglo, 9 Jan 68, p. 7, and 10 Jan 68, p. 7.  
JPRS 44,306

Latin America  
Political (Contd)

Mexican Communist Refutes Debray, by Gerardo Unzueta, 19 pp.  
SPANISH, np, El Siglo, Santiago, 21 Jan 68, pp. 11-14.  
JPRS 44,246

Current Regime Causes Concern Among the Military, 5 pp.  
SPANISH, np, El Siglo, Bogota, 24 Jan 68, p. 6.  
JPRS 44,392

Political Struggle in Parallel With Armed Struggle, by Gerardo Unzueta, 17 pp.  
SPANISH, np, El Siglo, Santiago de Chile, 28 Jan 68, pp. 11-14.  
JPRS 44,392

Intelligence and the CIA, by Roberto Martinez Caceres and Juan J. Hernandez Guerra, 10 pp.  
SPANISH, newspaper, Verde Olivo, Havana, 3 Dec 67, pp. 16-18; 58-59.  
JPRS 44,237

General Staff Holds Evaluation Meeting, by Yasella, 6 pp.  
SPANISH, per, Verde Olivo, Havana, 24 Dec 67, pp. 9-12.  
JPRS 44,392

Military

Strategy of Urban Warfare, by Abraham Guillen, 133 pp.  
SPANISH, per, Estrategia de la Guerrilla Urbana, 1966.  
\*ACSI J-4261  
ID 2204003068

Latin America  
Sociological

Progress of Public Health Assistance, by  
G. Hernandez, 8 pp.  
SPANISH, per, Bohemia, Havana, 5 Jan 68,  
pp. 25-26, 28-31.  
JPRS 44,328

A Survey of Cuban Films Since the Revolution,  
by Mario Rodriguez Aleman, 7 pp.  
SPANISH, per, Vide Universitaria, Havana,  
Aug 67, pp. 12-15.  
JPRS 44,237

SCIENTIFIC

Aeronautics

The Theory of Thin Wings in Subsonic Flow,  
by Sergei M. Belotserkovskiy. 250 pp.  
RUSSIAN, bk, Aug 1967.  
Plenum Press

Testing Aircraft Instruments, by P. I. Bulovskiy,  
E. M. Idel'sov.  
RUSSIAN, bk, Ispytaniya Aviatsionnykh Priborov,  
1966, 351 pp.  
\*FTD-HT-23-163-68C

Balancing Quality of an Aircraft with a  
Combined Configuration, by S. Yu. Skripnichenko,  
10 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 15-23.  
P100029868-V  
FTD-MT-65-72

Camber Balancing of a Delta Wing at Hyper-  
sonic Velocities, by Ye. V. Bulygina, 4 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 107-110.  
P100029868-V  
FTD-MT-65-72

Scientific  
Aeronautics (Contd)

Effect of the Number of Rotor Blades on  
the Characteristics of an Axiradial Com-  
pressor, by A. N. Sherstyuk, Ye. N.  
Zaychenko, 11 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh  
Zavedeniy. Aviatsionnaya Tekhnika, No 4,  
1965, pp 125-132.  
P100017168  
FTD-HT-66-769

An Approximate Method for Calculating the  
Parameters of a Detached Bow Wave, by  
Yu.I. Klimnyuk and A.P. Komarov, 13 pp.  
RUSSIAN, journal, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No. 4, 1966, pp. 81-89. P100006468  
FTD-HT-23-837-67

Experimental Investigation of the Interaction  
Zone During Injection of a Secondary Jet Into the  
Main Supersonic Flow, by V. S. Vinogradov.  
RUSSIAN, per, VUZ, Izv., Aviatsionnaya Tekh.,  
No 2, 1967, pp 81-88.  
\*Dept of Navy/APL/JHU J-1118

Aircraft Engine Design, by G. A. Kuz'min,  
405 pp.  
RUSSIAN, bk, Konstruktsiya Aviatsionnykh  
Dvigately, 1962, pp 3-443.  
P100030468-V  
FTD-MT-64-402

Use of Parafoveal Vision to Control Flight Para-  
meters, by N. D. Zavalova, V. A. Ponomarenko.  
RUSSIAN, per, Sb Probl Inzh Psikhol L. Vyp. No  
4, 1966, pp 85-92.  
\*FTD-MT-24-37-68

A Device for Directing the Flight of Aircraft,  
by V. P. Tarasenko.  
RUSSIAN, Patent No 184179, Class 72.  
\*FTD-HT-23-137-68E

Parachute with Automatically Controlled Air  
Release, by Kamila Ferusova, Klatovy.  
CZECH, Patent No 70724.  
\*ACBI J-4387  
ID 2204006868

Scientific  
Aeronautics (Contd)

Automatic Steering of Airplanes (The Siemens-Automatic Course-Steering Gear), by Von A. Thaus and B. v. Kaull, 8 pp.  
GERMAN, per, Siemens-Zeitschrift, Nov 1934, pp 369-372. P500032768  
Dept of Navy, NIC Tr No 2518

Supersonic Combustion and its Use in Hypersonic Jet Engines, Part II, by Piotr Wolanskii.  
POLISH, per, Technika Lotnicza i Astronautyczna, No 12, 1966, pp 8-12.  
Dept of Navy/APL/JHU T-2104

Agriculture

Agrochemical Characteristics of the Soils of USSR, Northern Caucasus Region, by A. V. Sokolov & E. I. Shkonde.  
RUSSIAN, per, Agrokhimicheskaya kharakteristika pochv SSSR, raiony severnogo Kavkaza. -- Akademiya Nauk SSSR, Pochvennyi Institut im. V. V. Dokuchaeva. Izdatel'stvo "Nauka," Moskva, Vol 3, 1964, 367 pp.  
\*CSFTI TT 68-50443

Agrochemical Characteristics of the Soils of the USSR, Transcaucasian Republics, by A. V. Sokolov & E. I. Shkonde.  
RUSSIAN, per, Agrokhimicheskaya kharakteristika pochv SSSR, Respubliki Zakavkaz'ya. -- Akademiya Nauk SSSR, Pochvennyi Institut V. V. Dokuchaeva. Izdatel'stvo "Nauka," Moskva, Vol 5, 1965, 320 pp.  
\*CSFTI TT 68-50444

Gossypol and its Derivatives, by A. L. Markman & V. P. Rzhikhin.  
RUSSIAN, bk, Gossypol i ego proizvodnye. Izdatel'stvo pichchevaya Promyshlennost,' Moskva, 1965, 242 pp.  
\*CSFTI TT 68-50335

Windbreaks and Yields, by A. R. Konstantinov & L. R. Struzer.  
RUSSIAN, bk, Lesnye pologiy i uroshei -- Leningrad, Gidrometeorologicheskoe Izdatel'stvo, 1965, 176 pp.  
\*CSFTI TT 68-50370

Scientific  
Agriculture (Contd)

Management of Forest Parks, by N. M. Tyul'panov.  
RUSSIAN, bk, Lesoparkovoe khozvaistvo -- Moskva, Izdatel'stvo Literatury po Stroitel'stvu, 1965, 173 pp.  
\*CSFTI TT 68-50369

Selection of Late-Flowering Walnuts, by A. F. Zarubin.  
RUSSIAN, per, Oselektsii posadnotsvetushchikh orekhov. -- Akademiya Nauk SSSR. Trudy Inst Lesa, Vol 8, 1951, pp 125-127.  
\*CSFTI TT 68-50410

Role of Mechanical Cultivation in Improvement of Soddy Podzol Soils, by F. I. Levin.  
RUSSIAN, bk, Rol' mekhanicheskoi obrabotki v uluchshenii svoistv dernovo-podzolistykh pochv, Izdatel'stvo Moskovskogo Universiteta, 1965, 127 pp.  
\*CSFTI TT 68-50338

Problem of the Effect of Drainage Depth on the Water-Physical Properties of Peat Soils and Gross Yield, by A. A. Ispolinov, 14 pp.  
RUSSIAN, per, Sb. Nauch. Rabot In-ta Melior, vodn. i bolotn. kh-va, Vol 2, 1953, pp 51-64.  
\*CSFTI TT 68-50434

Greater Control Over Plant Pests and Diseases Urged, by V. Shaykin, 8 pp.  
RUSSIAN, np, Sel'skaya Zhizn, Moscow, 16 Jan 68, p. 2.  
JPRS 44,379

Agricultural Equipment, by An. N. Karpenko & A. A. Zelenov.  
RUSSIAN, bk, Sel'skokhozvaistvennye mashiny, Moskva, Kolos, 1965, 404 pp.  
\*CSFTI TT 68-50339

Expert Knowledge of Grain and its Processed Products, by A. V. Myasnikova & Yu. S. Rall'.  
RUSSIAN, bk, Tovarovedenie zerna i produktov ego pererabotki. Uchebniki i Uchebnye Posobiya dlya Tekhnikumov Sistemy Zagotovok. -- Izdatel'stvo Kolos, Moskva, 1965, 485 1/2 pp.  
\*CSFTI TT 68-50336

Progress in Mechanization of Agriculture Cited, by A. I. Buyanov, 13 pp.  
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 11, Nov 1967, pp 3-6.  
JPRS 44109

Scientific  
Agriculture (Contd)

Methods, Results and Prospects of Winter Soft Wheat Breeding in the Ukrainian Steppe, by F. Kirichenko.  
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki, No 7, 1967, pp 46-59.  
\*ACSI J-4302  
ID 2204003868

The Conveyor-Like Corwing of Vegetables on Hydroponics, by V. Dadykin.  
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki, No 7, 1967, pp 65-68.  
\*ACSI J-4302  
ID 2204003868

The Effect of Water Logging of Soil on Transpiration Capacity of Trees, by A. V. Veretennikov, 5 pp.  
RUSSIAN, per, Vliyaniye izbytochnogo-uylazhneniya pochvy na transpiratsionnyuyu sposobnost'drevesnykh rastenii. -- Fiziologiya Rastenii, Vol 11, No 2, 1964, pp 274-278.  
\*CSFTI TT 68-50419

Hardening of Corn Seed, by A. Voronova.  
RUSSIAN, per, Zakalka semyan kukuruzy. -- Nauka i peredovoi Opyt v Sel'skom Khozyaistve, Vol 8, No 4, 1958, pp 37-39.  
\*CSFTI TT 68-50400

Livestock Distribution to Remote Highland Cooperatives, 7 pp.  
ALBANIAN, newspaper, Zeri i Popullit, Tirana, 5 Jan 68, pp.1 and 3.  
JPRS 44,323

Agricultural Production in Senegal, 1966-67, 11 pp.  
FRENCH, bulletin, Bulletin de l'Afrique Noire, Paris, No. 491, 10 Jan 68, pp. 9909-9916.  
JPRS 44,382

Crop and Weather Report, Nov 67, by Dr. D. Krumbiegel, 5 pp.  
GERMAN, per, Feldwirtschaft, East Berlin, No. 1, Jan 68, pp. 47-48.  
JPRS 44,258

Problems of Animal Breeding Expansion, by Jan Malkowski, 14 pp.  
POLISH, per, Wies Wpoliczesna, No. 1, Jan 68, pp. 40-50.  
JPRS 44,358

Scientific  
Agriculture (Contd)

Prepacking-A Modern Method for Organizing Meat Production and Sale, by S. Vasile, 3 pp.  
ROMANIAN, per, Industria Alimentara, No 6, 1967, pp 292-293.  
ACSI J-3292  
ID 2204040567

Some Tendencies in the Development of Agriculture, by Dr. Petar Milnovic, 8 pp.  
SERBO-CROATIAN, publication, Glasnik za Poljoprivredu i Zadrugarstvo, Vol 16, No. 12, Belgrade, Dec 67, pp. 15-19.  
JPRS 44,258

The Leading Field Crop -- Corn -- In Kosovo-Metohija, by Eng. Dobrivoje Stanisavljevic, 9 pp.  
SERBO-CROATIAN, publication, Glasnik za Poljoprivredu i Zadrugarstvo, Vol. 16, No. 12, Belgrade, Dec 67, pp. 39-44.  
JPRS 44,258

The Need and the Possibility for Organized Work in Education in Veterinary Science, by R. Pavlovic and T. Rajic, 5 pp.  
SERBO-CROATIAN, per, Veterinarski Glasnik, Belgrade, 1 Feb 68, pp. 61-63.  
JPRS 44,393

Pinar Del Rio and Havana Begin Cane Operations, 6 pp.  
SPANISH, newspaper, Granma, Havana, 8 Jan 68, p. 8.  
JPRS 44,246

Report on Corfo Agriculture and Livestock Programs, 22 pp.  
SPANISH, per, La Nacion, Santiago de Chile, 14 Jan 68, pp. 24, 25, 30.  
JPRS 44,392

The Problem of the Determination of Evaporativity (Maximum Possible Evaporation) from Agricultural Fields, by A. R. Konstantinov & R. N. Oleynik, 19 pp.  
UKRAINIAN, per, Trudy Ukraine Hydromet. Inst., No 41, 1964, pp 135-153.  
\*CSFTI TT 68-50433



Scientific  
Agriculture (Contd)

Firmly Grasp Science and Technology to Satisfactorily Guide Agricultural Production, by Nguyen Van Loc, 10 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12, Dec 67, pp. 32-40.  
JPRS 44,391

The 1966-1967 Fifth Month Rice Crop, by Bui Huy Dap, 11 pp.  
VIETNAMESE per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 363-368.  
JPRS 44,318

Resolution of the Council of Ministers on the Development of Stock Raising, 12 pp.  
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 371-377.  
JPRS 44,318

Basic Agricultural Problems of North Vietnam, by Dao The Tuan, 12 pp.  
VIETNAMESE, per, Khoa Hoc Ky Thuat Nong Nghiep, Hanoi, No. 70, Oct 67, pp. 377-383.  
JPRS 44,318

Crop Timing in Nam Ha, by Mai Phong, 5 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi, 25 Nov 67, p. 2.  
JPRS 44,238

Discussion of Animal Husbandry, Part VI, 5 pp.  
VIETNAMESE, newspaper, Nhan Dan, Hanoi, 22 Nov 67, p. 2.  
JPRS 44,210

1966-1967 Was Hai Duong's Best Winter-Spring Crop, 5 pp.  
VIETNAMESE, newspaper, Nhan-dan, Hanoi, 18 Dec 67, p. 2.  
JPRS 44,298

Provinces With Outstanding Crop Production for 1967, 9 pp.  
VIETNAMESE, daily, Nhan-dan, Hanoi, 1 Jan 68, p. 3.  
JPRS 44,228

Scientific  
Astronomy & Astrophysics

Behavior of Clocks Moving in a Central-Symmetric Gravitational Field, by R. F. Polishuk.  
RUSSIAN, per, Astronomicheskii Zh., Vol 44, No 5, 1967, pp 1104-1113.  
\*Dept of Navy/APL/JHU J-1132

Practical Application of Data Obtained from Meteorological Satellites, by K. Ya. Kondrat'ev.  
RUSSIAN, bk, Leningrad, Gidrometeorologicheskoye Izdatel'stvo, 1966, 454 pp.  
\*CSFTI TT 68-50310

Course in Astrophysics and Stellar Astronomy, Vol II.  
RUSSIAN, bk, Moscow, Gosudarstvennoye Izdatel'stvo Fiziko-Matematicheskoy Literatury, 1962, 684 pp.  
\*CSFTI TT 68-50307

Bibliography of Soviet Upper Atmosphere and Outer Space Studies, 48 pp.  
RUSSIAN, bibliography, Report of the Soviet Space Committee to the 10th Session of COSPAR at London, England, Dec 67, pp. 163-202.  
JPRS 44,343

Magnetic Observatories of Kazakhstan, by Kh. D. Kanonidi, F. M. Yanatkhonov, 10 pp.  
RUSSIAN, per, Vestnik Akademii Nauk Kazakhskoy SSR, Vol 12, No 1, Jan 1966, pp 79-85.  
JPRS 44107

Investigation of Recombination Spectrum N III of Stars and Nebulae, by A. A. Nikitin, 22 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 124-144.  
P100028868-V  
FTD-MT-64-145

Description of Method of Finding Distribution of Eccentricities of Orbits of Visual Binaries, by B. I. Fesenko, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 151-155.  
P100028863-V  
FTD-MT-64-145

Scientific  
Astronomy & Astrophysics (Contd)

Expedition of Astronomers to Region of Active Volcanoes Kamchatka, by V. V. Sharonov, 5 pp. RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 156-158. P100028868-V  
FTD-MT-64-145

New Discoveries about Celestial Bodies in 1965, by Hng (No initials given). CHINESE, per, T'ien wen ai hao che, No 4, 1966, pp 14-15.  
\*FTD-HT-23-103-48C

The Reduction of Astronomical Observations for Curvature of the Vertical, by K. Ledersteger. GERMAN, per, Schweizerische Zeitschrift für Vermessungswesen und Kulturtechnik und Photogrammetrie, Vol LIII, No 8, 9 Aug 1955, pp 225-239.  
\*ACIC TC-1393

Atmospheric Sciences

Optical Instability of the Earth's Atmosphere According to Stellar Observations, by I. G. Kolchinskiy. RUSSIAN, prt, Akademiya Nauk Ukrainskoy SSR, Glavnaya Astronicheskaya Observatoriya, 1967, 184 pp.  
\*ACIC TC-1395

Vertical Distribution of Atmospheric Ozone, by A. Kh. Khrgian. RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol 7, No 2, 1967, pp 317-322.  
\*ACSI J-4306  
ID 2204004268

Interpretation of the Initial Riometer Observations on Wake Island at the Time of the High-Altitude Burst of 9 July 1962, by S. I. Kozlov. RUSSIAN, per, Kosmicheskie Issledovaniya, Vol 5, No 5, 1967, pp 782-791.  
Dept of Navy/API/JHU T-2108

Distribution of Atmospheric Pressure at Sea Level in the Lake Baikal and Region, by V. A. Krotova, I. I. Lut. RUSSIAN, per, Trudy. AN SSSR. Sibirskoye Otdeleniye. Klimatologicheskoy Inst., No 10 (30), 1966, pp 14-33.  
\*FTD-MT-24-50-68

Scientific  
Atmospheric Sciences (Contd)

Time and Space Variability of Rainfall Precipitation According to Radar Data, by R. A. Anchugova, T. I. Morozova. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya Trudy. Fizika Oblakov i Aktivnykh Vozdeystviy, No 186, 1966, pp 86-92.  
\*ACSI J-4304  
ID 2204004068

Investigation of Glaze and Pime Deposits in the Lower 300-Meter Layer of the Atmosphere, by F. Ya. Klinov. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya Trudy. Prikladnaya Klimatologiya, No 200, 1966, pp 33-44.  
\*ACSI J-4171  
ID 2204001868

Vertical Distribution of High Winds in the Atmospheric Boundary Layer, by M. V. Zavarina and V. G. Tsverava. RUSSIAN, per, Glavnaya Geofizicheskaya Observatoriya Trudy. Prikladnaya Klimatologiya, No 200, 1966, pp 45-52.  
\*ACSI J-4172  
ID 2204001968

Statistical Characteristics of Cloud Cover, Based on Data Obtained by Aircraft and Terrestrial Observations, by D. M. Sonechkin. RUSSIAN, per, Mirovoy Meteorologicheskiy Tsentr Trudy. Sputnikovaya Meteorologiya, No 11, 1966, pp 34-41.  
\*ACSI J-4305  
ID 2204004168

Comparison of the Temperature, Pressure, and Density of the Tentative Standard Atmosphere with the Corresponding Data on the Northern Hemisphere and 30° Latitude ..., by Z. I. Gavrilova. RUSSIAN, per, Trudy. Moscow. Nauchno-Issledovatel'skiy Institut Aeroklimatologii, No 24, 1963, pp 61-65.  
\*FTD-MT-24-56-68

Mean and Extreme Pressure Values, by O. B. Martalova, M. V. Sokolova. RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii. Trudy, No 24, 1963, pp 54-58.  
\*FTD-MT-23-99-68

Scientific  
Atmospheric Sciences (Contd)

A Comparison of the Temperature, Pressure, and Density of the Tentative Standard Atmosphere with the Corresponding Data on the Northern Hemisphere and 30° Latitude Belts, by Z. I. Gavrilova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii, Trudy, No 24, 1963, pp 61-65.  
\*FTD-HT-23-99-68

Experiment in Subdividing the USSR into Climatic Regions for Engineering Purposes, by S. K. Kopeliovich.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii, Trudy, Voprosy Klimatologii, No 37, 1966, pp 103-117.  
\*ACSI J-4303  
ID 2204003968

The Interconnection of the Zonal Circulation of the Atmosphere of the Northern and Southern Hemispheres, by D. I. Stekhnovskiy, 11 pp.  
RUSSIAN, per, Tsentral'nyy Institut Prognozov, Trudy, Stroyeniye Troposfery i Stratosfery i Vzaimosvyaz' Tsirkulyatsii Severnogo i Yuzhnogo Polushariy, No 143, 1965, pp 53-60.  
ACSI J-4174  
ID 2204002068

An Experimental Investigation of the Methods of Measurements of Liquid Precipitation, by A. E. Konstantinov & A. A. Kisilenko, 23 pp.  
RUSSIAN, per, Trudy Ukraine Hydromet Inst, No 41, 1964, pp 163-185.  
\*CSFTI TT 68-50432

Characteristics of Aircraft Contrails in the Kiev Area, by N.M. Mikhaylenko, 7 pp.  
RUSSIAN, journal, Trudy Ukrainskogo Nauchno-Issledovatel'skogo Gidrometeorologicheskogo Instituta, No. 61, Kiev, 1966, pp. 101-105.  
JPRS 44,353

Reasons for the Stable Position of the Asiatic High over Mongolia, by Z. M. Makhover.  
RUSSIAN, per, Voprosy Sinopticheskoy i Aviatsonnoy Klimatologii, No 38, 1967, pp 54-59.  
\*FTD-MT-24-44-68

Scientific  
Atmospheric Sciences (Contd)

Carbonaceous Meteorites, by L. G. Kvasha, 18 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady Na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 44-55.  
P100030068-V  
FTD-MT-64-233

Recent Data about Physical Conditions on Planets of the Terrestrial Type, by D. Ya. Martynov, 33 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta An SSSR, 1963, pp 56-76.  
P100030068-V  
FTD-MT-64-233

Unity and Interconnectedness of Galactic System As Condition of Appearance of Life on Planets, by V. G. Fesenkov, 25 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 77-93.  
P100030068-V  
FTD-MT-64-233

General Conclusions, by A. I. Oparin, V. G. Fesenkov, 4 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vselennoy. Doklady na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta An SSSR, 1963, pp 94-96.  
P100030068-V  
FTD-MT-64-233.

Behavioral & Social Sciences

Certain Methods of Primary Treatment of Sound Information, by V. G. Zaytsev, 6 pp.  
RUSSIAN, Col of Art, AN UKPSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 74-79.  
P100028663-V  
FTD-MT-65-551

Scientific  
Behavioral & Social Sciences (Contd)

Analysis of a Cryotron Memory Circuit with many Stable States, by I. D. Voytovyuch.  
RUSSIAN, per, Avtomatika, No 6, 1966, pp 65-69.  
\*FTD-HT-23-145-68

Problems of Teaching Economic and Mathematical Methods Discussed at Conference, by A. V. Orlov, 6 pp.  
RUSSIAN, per, Ekonomika i Matematicheskiye Metody, No 6, Nov-Dec 1967, pp 945-947.  
JPRS 44100

Some General Theoretical Principles for the Construction of Learning Perception Systems, by V. A. Yakubovich.  
RUSSIAN, per, Kafedra Vychislitel'noy Matematiki i Vychislitel'nyy Tsentr. Vychislitel'naya Tekhnika i Voprosy Programirovaniya, No 4, 1965, pp 3-71.  
\*FTD-HT-23-70-68C

Memory Matrices Using Thin Magnetic Films, by G. P. Zharikov.  
RUSSIAN, rpt, Magnitnyye Elementy Vychislitel'noy Tekhniki, Pt 2, 1966, pp 130-134.  
\*FTD-HT-23-93-68

Biological & Medical Sciences

Fluorescence and Phosphorescence of Proteins and Nucleic Acids, by S. V. Konev. 204 pp.  
RUSSIAN, bk, Sep 1967.  
Plenum Press

Geochemistry of Epigenesis, by Aleksandr I. Perel'man. 300 pp.  
RUSSIAN, bk, Sep 1967  
Plenum Press

Distribution of Flora in USSR, by A. I. Tolmachev.  
RUSSIAN, bk, Areal'nyye rasteniya flory SSSR. Leningradskii Ordena Lenina - Gosudarstvennyi Universitet imeni A. A. Zhdanova. - Izdatel'stvo Leningradskogo Universiteta, 1965, 189 pp.  
\*CSFTI TT 68-50332

Scientific  
Biological & Medical Sciences (Contd)

Key to Parasitic Nematodes. Spiruraty and Filiariaty, by K. I. Skryabin.  
RUSSIAN, per, Opredelitel' paraziticheskikh nematod - Akademiya Nauk SSSR. Gel'mintologicheskaya Laboratoriya. Izdatel'stvo Akademii Nauk SSSR. Moskva-Leningrad., Vol 1, 1949, 516 pp.  
\*CSFTI TT 68-50330

Proteocephalata. Cestoda Helminth of Fish, Amphibians and Reptiles, by V. I. Freze.  
RUSSIAN, bk, Akad. Nauk SSSR. Gel'mintologicheskaya Laboratoriya. Osnovy Tsestodologii, Izdat. "Nauka", Vol V, 1965, 536 pp.  
\*CSFTI TT 68-50360

Use of Genetical Differentiation of Tissues From Increasing Sugar Content of Sugar Beets, by I. G. Gaevskaya, 12 pp.  
RUSSIAN, per, Ispol'zovanie geneticheskoi raznokachestvennosti tkanei dlya povysheniya sakharistosti sakarnoi svekly. -- Akademiya Nauk SSSR. Inst Genetiki. Genetika-Sel'skomu Khozyaistvu, 1963, pp 451-462.  
\*CSFTI TT 68-50422

The Winter Field Count of Elks in the Forest of the Middle Territory, by P. B. Yurgenson, 8 pp.  
RUSSIAN, per, Akad. Nauk, SSSR. Institut Geografii Otdel'nyi Ottisk. Moskva, Izd-vo Akad. Nauk SSSR, 1963, pp 117-124.  
\*CSFTI TT 68-50385

Mosquitoes (Family Phlebotomidae) Fauna of the USSR. Insects Diptera, by B. E. Bykhovskii.  
RUSSIAN, bk, Akademiya Nauk SSSR. Zoologicheskii Institut. Novaya Seriya. Izdatel'stvo "Nauka", Moskva-Leningrad, Vol 3, No 2, 1966, 390 pp.  
\*CSFTI tt 68-50341

Development of Soviet Roentgenoanatomy, by A.V. Drozdova, 21 pp.  
RUSSIAN, per, Arkhiv Anatomii, Gistologii i Embriologii, Vol 53, No. 11, Leningrad, Nov 67, pp. 3-15.  
JPRS 44,294

Scientific  
Biological & Medical Sciences (Contd)

Twelve Selected Articles From: Biologicheskie Aspekty Izucheniya Vodokhranilishch, Moskva, Izdatel'stvo Akademii Nauk SSSR.  
RUSSIAN, per, Biologicheskie Aspekty Izucheniya Vodokhranilishch, Moskva, Izdatel'stvo Akademii Nauk SSSR, 1963, pp 60-77, 78-90, 123-129, 130-142, 178-183, 184-194, 195-200, 201-216, 217-223, 250-257, 270-302, 303-308.  
\*CSFTI TT 68-50389

Biological Basis for Propagation of Woody Plants by Cuttings, by D. A. Komissarov.  
RUSSIAN, bk, Biologicheskie osnovy razmnozheniya drevesnykh rastenii cherenkami. -- Moskva, Lesnaya Promyshlennost', 1964, 293 pp.  
\*CSFTI TT 68-50372

The Studies in the Viability of the Pollen and Stigmata of the Flowers Developing on the Isolated Branches, by S. I. Mashkin.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 45, No 4, 1960, pp 547-551.  
\*CSFTI TT 68-50396/1

Introgressive Hybridization in the Flora of the Baikal Area of Siberia, by E. G. Bobrov.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 46, No 3, 1961, pp 313-327.  
\*CSFTI TT 68-50396/2

Ecology of Flowering and Fruiting of Acer Negundo and its Hybrids, by M. A. Beskaravainaya.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 46, No 8, 1961, pp 1171-1177.  
\*CSFTI TT 68-50396/3

Inneculation of Woody Plants at Their Early Growing Phases, by E. I. Zaar & E. A. Yakovleva.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 3, 1962, pp 371-373.  
\*CSFTI TT 68-50396/4

On the Development of Buds of Different Sexual Differentiation in Forest Trees, by E. G. Minina.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 7, 1962, pp 938-944.  
\*CSFTI TT 68-50396/5

Scientific  
Biological & Medical Sciences (Contd)

"Neoteny" in Acer Platanoides L., by A. N. Krasnitskii.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 47, No 10, 1962, pp 1529-1531.  
\*CSFTI TT 68-50396/6

The Structure of the Embryo and the Seedling of Acer Platanoides L., by E. A. Kondrat'eva-Mel'vil'.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 48, No 2, 1963, pp 199-210.  
\*CSFTI TT 68-50396/7

Dwarf Birch in the Tundras of the Archangel Region, by I. A. Perfil'ev.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 48, No 8, 1963, pp 1138-1150.  
\*CSFTI TT 68-50396/8

Microscopic Studies of Spruce and Larch Wood Infected by Woodstaining Fungi, by A. A. Konstantnaya.  
RUSSIAN, per, Botanicheskii Zhurnal, Vol 49, No 1, 1 Jan 1964, pp 105-109.  
\*ACSI J-4414  
ID 2204007768

Fructification of Acer Mandschuricum in Leningrad, by N. E. Bulygin.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 49, No 3, 1964, pp 412-417.  
\*CSFTI TT 68-50396/9

On the Potential Photosynthesis of Spruce Seedlings Under Different Conditions of the Light, by I. V. Katrushenko.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 1, 1965, pp 91-95.  
\*CSFTI TT 68-50396/10

A Comparative Morphological Study of Emerged Seedlings of Some Betulaceae, by I. A. Korchagina.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 3, 1965, pp 335-349.  
\*CSFTI TT 68-50396/11

Parthenocarpy in Betula, Populus and Robinia Pseudoacacia, by G. D. Frolova.  
RUSSIAN, per, Botanicheskii Zhurnal, Moskva, Vol 50, No 3, 1965, pp 394-396.  
\*CSFTI TT 68-50396/12

Scientific  
Biological & Medical Sciences (Contd)

Epidemiology of Botulism, by T.I. Bulatova,  
10 pp.  
RUSSIAN, pamphlet, Botulizm i Yego Profil-  
aktika, published by the Central Scientific  
Research Institute of Sanitary Education,  
Ministry of Health USSR, Moscow, 1966, pp. 22-32.  
JPRS 44,310

Changes of Myoglobin Content in the Heart at  
Experimental Myocardial Infarction and  
Atherosclerosis, by R. A. Frol'kis.  
RUSSIAN, per, Byull' Eksp Biol Med, Vol 64, No 10,  
1967, pp 19-21.  
HEW-NIH  
1-32-68

Daily Changes of Protein Exchange and of Mitotic  
Activity of the Cells in the Adrenal Cortex, by  
A. Ju. Truupyl'd.  
RUSSIAN, per, Byull' Eksp Biol Med, Vol 64, No 10,  
1967, pp 83-85.  
HEW-NIH  
1-36-68

Differences Between Tetradontoxin and  
Novocain in Mechanism of Depressing Action  
on Frog Skeletal Muscle Fibers, by B.I.  
Khodorov and Ye G. Vornovitskiy, 7 pp.  
RUSSIAN, per, Byulleten' Eksperimental'noy Biol-  
ogii i Meditsiny, No. 11, Moscow, Nov 67,  
pp. 34-37.  
JPRS 44,296

A Natural Interspecific Hybrid in the Genus  
Juglans, by N. G. Akimochkin, 4 pp.  
RUSSIAN, per, Estestvennyi mezhvidovoi gibriz iz  
road Juglans. -- Byulleten' Glavnogo Botanicheskogo  
Sada, No 44, 1961, pp 11-14.  
\*CSFTI TT 68-50421

Juglans Species in the "Trostjanev" Arboretum  
and their Fruiting, by G. E. Misnik, 4 pp.  
RUSSIAN, per, Orekh i dendroparka "Trostanets"  
i ikh plodonoshenie. -- Byulleten' Glavnogo  
Botanicheskogo Sada, No 50, 1963, pp 49-52.  
\*CSFTI TT 68-50426

Five Selected Articles From: Byulleten' Instituta  
Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii  
Vodokhranilishch, No 11, 1961, pp 28-32, 37-41,  
42-43, 44-48, 61-64.  
\*CSFTI TT 68-50390

Scientific  
Biological & Medical Sciences (Contd)

Four Selected Articles From: Byulleten' Instituta  
Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii  
Vodokhranilishch, No 12, 1962, pp 35-38, 50-53,  
56-59, 62-64.  
\*CSFTI TT 68-50388

Four Selected Articles From: Byulleten' Instituta  
Biologii Vodokhranilishch.  
RUSSIAN, per, Byulleten' Instituta Biologii  
Vodokhranilishch, No 13, 1962, pp 24-26, 26-30,  
48-51, 57-61.  
\*CSFTI TT 68-50387

Investigation of Plasma Parameters in a Strong  
Magnetic Field with the Aid of Double Electric  
Probes, I. A. Kovan, Yu. L. Moskvina.  
RUSSIAN, bk, Diagnostika Plazmy, 1963, pp 237-  
246.  
\*FTD-MT-24-29-68

Change in Weight and in Moisture of Picea Excelsa  
and Abies Sibirica Needles in Relation to Their  
Own Age and the Age of the Tree, by M. D. Danilov,  
4 pp.  
RUSSIAN, per, Izmenenie vesa i vlazhnosti khvoi  
obyknovennoi i pikhty sibirskoi v svyazi s  
sobstvennym vozrastom i vizrastom derevu. --  
Doklady Akademii Nauk SSSR, Vol 61, No 2, 1948,  
pp 375-378.  
\*CSFTI TT 68-50424

Comparative Biochemical Study on the Contractile  
Proteins of Striated Muscles at Various Stages  
of Phylo- and Ontogenesis, by I. I. Ivanov.  
RUSSIAN, per, Dokl Akad Nauk SSSR, Vol 60, No 3,  
1948, pp 417-420.  
HEW-NIH  
1-7-68

Seed Treatments for Increasing Field Germination  
of Seed and Rate of Growth of the Resulting  
Seedlings, by O. I. Podol'skaya, 3 pp.  
RUSSIAN, per, Povyshenie gruntovoi vskhozhesti  
semyan i uskorenie rosta seyantsev. -- Doklady  
Akademii Nauk SSSR, Moskva, Vol 67, No 3, 1949,  
pp 573-575.  
\*CSFTI TT 68-50426

The Influence of Environment Upon Hybrid Walnut Seedlings, by A. M. Ozol & A. F. Zarubin, 4 pp.  
RUSSIAN, per, Vliyaniye uslovii zhizni na izmenenie gibridnykh-seyantsev orekhov. -- Doklady, Akademii Nauk SSSR, Vol 87, No 2, 1952, pp 287-290.  
\*CSFTI TT 68-50427

The Germinative Energy and Capacity of Seeds of Quercus Rubra and Juglans Regia as Related to Their Position in the Soil, by G. Kh. Molotkovskii, 3 pp.  
RUSSIAN, per, Energiya prorastaniya i vskhozhest' plodov duba i gretskogo orekha v zavisimosti ot ikh polozeniya v pochve. -- Doklady, Akademii Nauk SSSR, Vol 102, No 3, 1955, pp 637-639.  
\*CSFTI TT 68-50428

Influence of Vitamins on Opening of Resting Buds, by S. O. Grebinskii & L. A. Lyukova, 3 pp.  
RUSSIAN, per, Vliyaniye vitaminov na raspuskanie pokoyashchikhsya pochek. -- Doklady, Akademii Nauk SSSR, Moskva, Vol 105, No 6, 1955, pp 1361-1363.  
\*CSFTI TT 68-50429

Biosynthesis of Carnosine by Muscle Tissue in Vitro, by L. G. Razina.  
RUSSIAN, per, Dokl Akad Nauk SSSR, Vol 111, No 1, 1956, pp 161-164.  
HEW-NIH  
1-3-68

Chlorophyll Formation in the Leaves of Tradescantia Guianensis in the Dark, by V. L. Kaler, D. V. Fedyun'kin, 6 pp.  
RUSSIAN, per, AN SSSR. Doklady, Vol 170, No 2, 1966, pp 469-471.  
P100018168  
FTD-HT-67-485

Protogyny in Relation to Functional Male Sterility in Helianthus Annus L., by M. Lazarov, 4 pp.  
RUSSIAN, per, Protoginiya i svyazannaya nei organov u Helianthus Annus L. -- Doklady Bolgarskoi Akademii Nauk, Sofiya, Vol 16, No 3, 1963, pp 309-312.  
\*CSFTI TT 68-50431

Effect of Moisture Content of Shoots and Needles on Growth of Pine Branches, by S. A. Mamaev, 3 pp.  
RUSSIAN, per, Vliyaniye vlagosoderzhaniya pobegov i khvoi na rost vetvei. -- Moskovskaya Ordena Lenina Sel'skokhozyaistvennaya Akademiya imeni K. A. Timiryazeva. Doklady TSKHA, Nauchnaya Konferentsiya, Vol 26, No 1, 1956, pp 293-295.  
\*CSFTI TT 68-50399

Importance of Using Cybernetics in Medicine Discussed, by V. Tikhomirov, 6 pp.  
RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 47, Moscow, Nov 67, p. 34.  
JPRS 44,194

Elements of the Theory of Random Pulse Trains, by N. M. Sedyakin, 216 pp.  
RUSSIAN, bk, Elementy Teorii Sluchaynykh Impul'snykh Potokov, 1965.  
ACSI J-3661  
ID 2204052167

The Pneumocardiophone, by R. M. Bayevskiy, V. A. Ivanov, 6 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, Vol 52, No 10, 1966, pp 1273-1275.  
P100016268  
FTD-HT-67-484

Fifty Years of Soviet Physiology, 16 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, No 11, Nov 1967, pp 1269-1281.  
JPRS 44064

Development of Physiology in Siberia during the 50 Years of the Soviet Regime, by Ye. F. Larin, V. A. Pegel', 9 pp.  
RUSSIAN, per, Fiziologicheskiy Zhurnal SSSR, No 11, Nov 1967, pp 1281-1287.  
JPRS 44064

Physiological Basis for Establishment of Hardy Forests, by A. I. Akiyamaiko.  
RUSSIAN, bk, Fiziologicheskoe obosnovanie sozdaniya ustoychivyykh lesnykh nasazhdenii. -- Moskva, Lesnaya Promyshlennost', 1965, 312 pp.  
\*CSFTI TT 68-50371

Scientific  
Biological & Medical Sciences (Contd)

Soviet Labor Hygiene for the Past 50 Years, by A.A. Letavet and A.V. Roshchin, 12 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 3-12.  
JPRS 44,198

Soviet Occupational Pathology for the Last 50 Years, by S.I. Ashbel', et al, 10 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 12-19.  
JPRS 44,198

Labor Hygiene in the Chemical Industry for the Past 50 Years, by A.S. Arkhipov and Ye. N. Marchenko, 7 pp.  
RUSSIAN, per, Gigiyena truda i professional'-nyye zabolevaniya, No. 11, Moscow, Nov 67, pp. 36-40.  
JPRS 44,198

Endothelioma of the Thoracic Portion of the Aorta, by R. E. Kaigorodova.  
RUSSIAN, per, Grudn.-Khir, Jul-Aug 1963, pp 88-90.  
\*Dept of Navy/NMS 1243

The Echinodermata, Vol 1. Echinodermes. Echinides (Echinoidea) No 1. Fauna of Russia and Adjacent Countries, by A. H. D'yakonov.  
RUSSIAN, bk, Iglokozhiya (Echinodermata) Tom 1. Morskoe ezhi (echinoidea) Vypusk 1. Fauna Rossii i sopredel'nykh "stran", Petrograd, 1923, 370 pp.  
\*CSFTI TT 68-50345

The "Introductory Type" of Male Sterility of Trees and Shrubs, by A. Maurin, 3 pp.  
RUSSIAN, per, Introduktsionnyi tip steril'nosti u drevesnykh i kustrinikovykh porod. -- Izvestiya Akademii Nauk Latvskoi SSR, No 5, 1964, pp 96-98.  
\*CSFTI TT 68-50423

Studies on Biological Methods of Control of Agricultural and Forest Pests (Lectures at the Symposium of Nov 17-20, 1964).  
RUSSIAN, per, Issledovaniya po biologicheskomu metodu bor'by s vreditel'nykh sel'skogo i lesnogo khozyaistva (doklady k simpoziumu 17-20 novabrya 1964 g.), -- Akademiya Nauk SSSR, Sibirskoe Otdelenie, Biologicheskii Inst, Novosibirsk, 1964, 224 pp.  
\*CSFTI TT 68-50359

Scientific  
Biological & Medical Sciences (Contd)

Explorations of the Fauna of the Seas. IV(XII). Biological Results of the Soviet Antarctic Expedition 1955-1958, by E. N. Pavlovskii.  
RUSSIAN, bk, Issledovaniya fauny morei IV(XII). Rezul'taty biologicheskikh issledovaniy Sovetskoi Antarkticheskoi Ekspeditsii 1955-1958 gg. Akad. Nauk SSSR. Zoologicheskii Institut, Leningrad, 1967, 417 pp.  
\*CSFTI TT 68-50313

Preliminary Results of Soviet Research on Zooplankton and its Luminescence in the Eastern Caribbean, A.S. Artemkin, et al., 10 pp.  
RUSSIAN, bk, Issledovaniya Tsentral'no-amerikanskikh Morey, No. 1, Kiev, Naukova, Dumka Publishing House, 1966, pp. 117-124.  
JPRS 44,254

Megaspore Genesis and Embryo Sac Formation in Pepper (Capsicum), by E. M. Mutafyan, 5 pp.  
RUSSIAN, per, Megasporogenez i obrazovanie zapodyshevogo meshka u pertsy. -- Akademiya Nauk Armyanskoi SSR. Izvestiya, Biologicheskije Nauke, Vol 17, No 1, 1964, pp 95-99.  
\*CSFTI TT 68-50398

Physiological Effects of Weightlessness, by I. I. Kas'yan, I Kopanov.  
RUSSIAN, per, AN SSSR. Izvestiya, Seriya Biologicheskaya, No 4, 1967, pp 489-501.  
\*FTD-MT-24-36-68

Peculiarities of Physiological Reactions of Pilots During Simulated Egress from a Spacecraft, by D.G. Maksimov et al, 18 pp.  
RUSSIAN, journal, Izvestiya Akademii Nauk SSR, Seriya Biologicheskaya, No. 5, Moscow, Sept-Oct 67, pp. 682-693.  
JPRS 44,209

Ectoparasites from Sand Martin Nest Located on Cliffs of the Dzhydy River Shore (Southwestern Transbaikal), by V. N. Prokop'yev.  
RUSSIAN, per, Izv Irkutsk Gosud Nauch Protivoochum, No 5, 1963, pp 186-187.  
HEW-NIH (Only on Loan)  
1-39-68



Scientific  
Biological & Medical Sciences (Contd)

Sesquiterpenic Hydrocarbons of Resins of Scotch Pine, *Pinus Sylvestris*, by V. A. Pentegova & O. V. Lebedeva, 4 pp.  
RUSSIAN, per, *Seskviterpeny uglevodorody zhivitsy sosny obyknovnoy (Pinus Sylvestris L.)* -- *Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR, Seriya Khimicheskikh Nauk*, Vol 1, No 3, 1964, pp 61-64.  
\*CSFTI TT 68-50414

Fifty Years of Soviet Cardiology, by P. Ye. Lukomskiy, 12 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 3-12.  
JPRS 44,404

Space Cardiology and Its Clinical Aspects, by V.V. Parin, 8 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 13-18.  
JPRS 44,404

Achievements of Soviet Cardiosurgery, by G.M. Solov'yev, 6 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 18-22.  
JPRS 44,404

Basic Trends in Research on Biochemistry of the Myocardium, by S. Ye. Severin, 11 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 22-30.  
JPRS 44,404

Research by Soviet Scientists in the Physiology of Blood Circulation, by G. I. Kositskiy, 8 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 30-36.  
JPRS 44,404

Achievements in X-Ray Cardiology in the Fifty Years of Soviet Power, by N.A. Ivanitskaya, 2 pp.  
RUSSIAN, per, *Kardiologiya*, Vol 7, No. 11, Moscow, Nov 67, pp. 59-66.  
JPRS 44,404

Scientific  
Biological & Medical Sciences (Contd)

New Polyamides in Fibers Based on Omega-Amino Acids which Contain Cyclohexane Rings in the Basic Chain, by R. S. Muromova, 11 pp.  
RUSSIAN, per, *Khimicheskiye Volokna*, No 4, Jul/Aug 1967, pp 69-73.  
ACSI J-3721  
ID 2204053167

Hemangioendothelioma of the Stomach, by E. S. Futorian.  
RUSSIAN, per, *Khir., Moscow*, Vol 39, 1963, pp 128-129.  
\*Dept of Navy/NMS 1242

Gastric Hemangioendothelioma, by A. I. Bukhman, 4 pp.  
RUSSIAN, per, *Khir.*, Vol 40, Dec 1964, pp 126-127.  
Dept of Navy/NMS 1240

A Rare Localization of Hemangioendothelioma in the Small Intestine, by V. I. Pipia, 3 pp.  
RUSSIAN, per, *Khir., Moscow*, Vol 41, June 1965, pp 122-123.  
Dept of Navy/NMS 1237

Conclusion, Weaknesses and Problems of Soviet Surgical Practice, by N. I. Krakovskiy and Yu. Ya. Gritsman, 16 pp.  
RUSSIAN, bk, *Khirurgicheskiye Oshibki*, 1967, pp 170-191.  
JPRS 44066

Use of Chrome Plated and Lacquered Cans for Confectionery Foods, by Yu. N. Mishnev.  
RUSSIAN, per, *Khlebopekarnaya i Konditerskaya Promyshlennost*, No 10, 1967, p 35.  
\*ACSI J-4318  
ID 2204004368

Recent Pattern Recognition Problems, by V. A. Kovalevskiy.  
RUSSIAN, per, *Kibernetika*, No 5, 1967, pp 78-86.  
\*FTD-HT-23-155-68

Maximum Oxygen Consumption and Functional State of the Circulatory System Following Simulated Weightlessness, by V. S. Georgiyevskiy.  
RUSSIAN, rpt, *Kislородnyy Rezhim Organizma i Yego Regulirovaniye*, 1966, pp 225-229.  
\*FTD-HT-23-124-68

Scientific  
Biological & Medical Sciences (Contd)

The Oxygen Regime of the Organism and its Regulation, by N. V. Lauer.  
RUSSIAN, bk, Kislородnyy rezhim organizma i yego regulirovaniye. Kiev, Izdatel'stvo "Naukova Dumka", 1966, 400 pp.  
\*CSFTI TT 68-50302

Short Key to the Bloodsucking Flies of the Fauna of the SSSR, by I. A. Rubtsov.  
RUSSIAN, bk, Kratkii opredelitel' krovososushchikh moshek fauny SSSR. Opredeliteli po Faune SSSR, Ispavaemye - Zoologicheskim Institutom Akademii Nauk SSSR. Izdatel'stvo Akademii Nauk SSSR. Moskva-Leningrad, No 77, 1962, 227 pp.  
\*CSFTI TT 68-50333

The Use of Radioactive Atoms in Forest Research, by F. L. Shchepot'ev & A. I. Pobegailo.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 9, No 1, 1956, pp 22-26.  
\*CSFTI TT 68-50395/1

Cronartium Flaccidum in the Pinus Sylvestris Forests of Southern Yakutia, by A. N. Guseva.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 3, 1957, pp 39-41.  
\*CSFTI TT 68-50395/2

Cunninghamia, by A. V. Nenarokomov.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 5, 1957, pp 88-90.  
\*CSFTI TT 68-50395/3

On Yields of Spruce Picea Seeds, by L. S. Alaev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 10, No 10, 1957, pp 75-76.  
\*CSFTI TT 68-50395/4

A Walnut Hybrid in Dublyany Village, by E. I. Zhuravskaya.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 11, No 9, 1958, pp 75-76.  
\*CSFTI TT 68-50395/5

Do Shelterbelts Have a Forest Microclimate?, by S. N. Andrianov.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 11, No 11, 1958, pp 77-78.  
\*CSFTI TT 68-50395/6

Scientific  
Biological & Medical Sciences (Contd)

Breeding for Drought Resistance in Seedlings of Acer Negundo Hybrids, by M. A. Beskaravainaya.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 12, No 8, 1959, pp 79-80.  
\*CSFTI TT 68-50395/7

Anti-Erosional Importance of Shelterbelts in Moldavia, by V. T. Zaitsev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 12, No 12, 1959, pp 71-72.  
\*CSFTI TT 68-50395/8

We Are Growing European Alder on Poor Soils, by I. K. Esipov & A. I. Lisachenko.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 13, No 5, 1960, pp 64-65.  
\*CSFTI TT 68-50395/9

Yields from Shelterbelts in the Kamennaya Steppe, by E. S. Pavlovskii.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 13, No 7, 1960, p 55.  
\*CSFTI TT 68-50395/10

The Effect of Undercutting Roots and of Treating Them with I A A on the Growth of Pinus Sylvestris, by A. I. Baglai.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 15, No 3, 1962, pp 38-39.  
\*CSFTI TT 68-50395/11

Low-Volume Aerial Spraying to Control Forest Pests in the Ukraine, by D. F. Rudnev.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 16, No 5, 1963, pp 45-49.  
\*CSFTI TT 68-50395/12

Elster Rust on Siberian Cedar Pine in Southern Yakutia, by A. N. Guseva.  
RUSSIAN, per, Lesnoe Khozyaistvo, Vol 17, No 11, 1964, pp 51-52.  
\*CSFTI TT 68-50395/13

Forest Soil Science, by N. P. Remezov & P. S. Pogrebnyak.  
RUSSIAN, bk, Lesnoe Pochvovedenie. - Moskva. Lesnaya Promyshlennost', 1965, 324 pp.  
\*CSFTI TT 68-50367

Scientific  
Biological & Medical Sciences (Contd)

The Influence of Seed Pretreatment on Field Germination, by A. A. Danilova.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 2, No 1, 1959, pp 54-56.  
\*CSFTI TT 68-50397/1

Cronastium Quercuum--A Chronic Disease of Pinus Sylvestris Forests of the Amur Region, by E. N. Ierusalimov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 3, No 3, 1960, pp 161-162.  
\*CSFTI TT 68-50397/4

Juglans Madshurica in the North Part of the Central Forest-Steppe Zone, by N. G. Akimochkin.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 4, No 3, 1961, pp 156-158.  
\*CSFTI TT 68-50397/6

The Kinematics of Vibration Cutting, by A. A. Solov'ev.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 5, No 6, 1962, pp 114-124.  
\*CSFTI TT 68-50397/9

The Effect of Swaging and Shaping on Micro-Hardness, Macro-Structure and the Distribution of Deformations in Frame-Saw Teeth, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 6, No 1, 1963, pp 119-126.  
\*CSFTI TT 68-50397/11

On the Types of Resin Production of Pine, by I. I. Orlov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 6, No 5, 1963, pp 147-148.  
\*CSFTI TT 68-50397/10

Urgent Problems of Prosthetics, by V. Barybin.  
RUSSIAN, np, Meditsinskaya Gazeta, Vol 47, No 2, 13 June 1967, p 2.  
Dept of Navy/APL/JHU/ T-2102

A Rare Case of Ixodid Localisation in a Human, by I. V. Shcherbinin.  
RUSSIAN, per, Med Parazit (Moskva), Vol 26, Suppl 1, 1957, p 61.  
HEW-NIH (Only on Loan)  
1-40-68

Scientific  
Biological & Medical Sciences (Contd)

Water Balance and Behavior of Hyalomma Asiaticum Ticks in Desert Areas, by Yu. S. Balashov.  
RUSSIAN, per, Med Parazit (Moskva), Vol 29, No 3, 1960, pp 313-320.  
HEW-NIH (Only on Loan)  
1-37-68

Protective Reactions Against Ticks in Rodents, by N. A. Nikitina.  
RUSSIAN, per, Med Parazit (Moskva), Vol 33, No 2, 1964, pp 141-144.  
HEW-NIH (Only on Loan)  
1-38-68

Paths of Development of Medical Radiology in the USSR, by G.A. Zedgenidze, 7 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 3-7.  
JPRS 44,356

The Fiftieth Anniversary of Soviet Radiobiology, by Ye. I. Vorob'yev, and L.V. Funshteyn, 22 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 8-25.  
JPRS 44,356

Clinical Radioisotopic Diagnostics in the USSR, by V.Z. Agranat, et al, 11 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol 12, No. 11, Moscow, Nov 67, pp. 26-34.  
JPRS 44,356

Special Results and Prospects of Development of Radiation Therapy in the USSR, by A. V. Koslova, and L.D. Lindenbraten, 24 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol. 12, No. 11, Moscow, Nov 67, pp. 35-52.  
JPRS 44,356

Development of Domestic Radiation Hygiene During the Years of Soviet Power, by P.I. Moiseytsav, 11 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya, Vol. 12, No. 11, Moscow, Nov 67, pp. 63-72.  
JPRS 44,356

Scientific  
Biological & Medical Sciences (Contd)

Stages of Development of Clinical Dosimetry  
in the USSR, by A.N. Krongauz, 10 pp.  
RUSSIAN, per, Meditsinskaya Radiologiya,  
Vol. 12, No. 11, Moscow, Nov 67, pp. 73-  
79.  
JPRS 44,356

Method of Thinning of Mixed Spruce and Broad  
Leafed Stands, by L. A. Kairyukshtis.  
RUSSIAN, bk, Metod prorezhivaniya listvenno-  
elovykh nasazhdenii. -- Litovskii Nauchno-  
issledovatel'skii Institut. Lesnogo Khozyaistva  
Gosleskomiteta pri Gosplane SSSR, Kaunas, 1964,  
15 pp.  
\*CSFTI TT 68-50366

Contribution to the Methods of Refractometric  
Determination of the Plant Cell Sap Concentration,  
by E. A. Yablonskii, 5 pp.  
RUSSIAN, per, K metodike refraktometricheskogo  
opredeleniya konts entral'sii kletochnogo soka  
rastenii. -- Gosudarstvennyi Nikitskii  
Botanicheskii Sad. Trudy, Sbornik Rabot po  
Dendrologii i Dekorativnomu Sadovodstvu, Vol 32,  
1960, pp 101-105.  
\*CSFTI TT 68-50412

Interspecies Hybridization of Walnuts, by  
A. S. Yablokov, 8 pp.  
RUSSIAN, per, Mezhdubidovaya gibridizatsiya  
orekhov. -- Sovetskie Subtropiki, No 5, 1936.  
pp 53-60.  
\*CSFTI TT 68-51401

Some Results in the Development of Soviet  
Industrial Microbiology in the Last 50 Years,  
by I. L. Rabinova.  
RUSSIAN, per, Mikrobiologiya, Vol 36, No 5,  
1967, pp 811-848.  
\*ACSI J-4415  
ID 2204007868

Advanced Schools and the Training of Micro-  
biologists, by N. S. Yegorov.  
RUSSIAN, per, Mikrobiologiya, Vol 36, No 5,  
1967, pp 850-859.  
\*ACSI J-4415  
ID 2204007868

Instructions on Works of Legal-Psychiatric  
Expertise in the USSR.  
RUSSIAN, per, Ministry of Public Health, USSR,  
1955, 7 pp.  
HEW-NIH  
1-18-68

Scientific  
Biological & Medical Sciences (Contd)

Instructions Pertaining to Emergency Hospitaliza-  
tion of Mental Patients who Represent a Hazard  
to the Public.  
RUSSIAN, per, Ministry of Public Health, USSR,  
1961, 3 pp.  
HEW-NIH  
1-20-68

The Principles of the Organization of Medical  
Assistance to Psychiatric Patients in the USSR.  
Interregional Seminar of the WHO on Mental Hygiene.  
RUSSIAN, per, Moscow, Ministry of Public Health  
of the USSR, Central Inst of Postgraduate Medicine,  
1967, 11 pp.  
HEW-NIH  
1-15-68

The Duties and Program of the Psychoneurological  
Dispensary. Interregional Seminar of the WHO  
on Mental Hygiene and the Organization of  
Psychiatric Services.  
RUSSIAN, per, Moscow, Ministry of Public Health  
of the USSR, Central Institute of Postgraduate  
Medicine, 1967, 12 pp.  
HEW-NIH  
1-17-68

Health Propaganda in the Prophylaxis and Treat-  
ment of Mental Illnesses. Interregional Seminar  
of the WHO on Mental Hygiene and the Organization  
of Psychiatric Assistance, by L. L. Rokhline.  
RUSSIAN, per, Moscow, Ministry of Public Health  
of the USSR, Central Inst of Postgraduate Medicine,  
1967, 13 pp.  
HEW-NIH  
1-33-68

Education and Postgraduate Training of Medical  
Staffs for Psychiatry in the USSR. Interregional  
Seminar of the WHO for the Organization of  
Psychiatric Services and of Psychiatric Hygiene,  
by V. M. Morosov.  
RUSSIAN, per, Moscow, Ministry of Public Health  
of the USSR, Central Inst of Postgraduate Medicine,  
1967, 14 pp.  
HEW-NIH  
1-12-68

Fundamental Principles of the Organization of  
Public Health in the USSR. Interregional Seminar  
of the WHO on Mental Hygiene and the Organization  
of the Psychiatric Services, by L. G. Veber.  
RUSSIAN, per, Moscow, Ministry of Public Health of  
the USSR, Central Inst of Postgraduate Medicine,  
1967, 17 pp.  
HEW-NIH  
1-19-68

Scientific  
Biological & Medical Sciences (Contd)

Social Assistance to Mental Patients and the Problems of Assessment of Capacity for Work. Interregional Seminar of the WHO on Mental Hygiene and Organization of the Psychiatric Services, by D. E. Melekhov.  
RUSSIAN, per, Moscow, Ministry of Public Health of the USSR, Central Inst of Postgraduate Medicine, 1967, 21 pp.  
HEW-NIH  
1-16-68

The Mammals of the Caucasus, A History of the Evolution of the Fauna, by N. K. Vereshchagin.  
RUSSIAN, bk, Mlekopitayushchie Kavkaza, Istoriya formirovaniya fauny, 1959.  
CFSTI TT 66-51143

The Structure of Pepsin Crystals: Projection of Electron Density at 5.5 Angstrom Resolution, by V.V. Borisov, et al, 11 pp.  
RUSSIAN, per, Molekulyarnaya Biologiya, Vol 1, No. 4, Moscow, July-Aug 67, pp. 596-602.  
JPRS 44,311

Interaction of Phenol and Aeromatic-Amine Inhibitors in Hydrocarbon-Oxidation Reactions, by G. V. Karpukhina, Z. K. Maysus.  
RUSSIAN, per, Neftekhimiya, Vol 6, No 4, 1966, pp 603-607.  
\*FTD-HT-23-164-68

Experience of Dispensary Registration of Neuro-Psychotic Patients, by M. I. Rybal'skiy.  
RUSSIAN, per, Opyt dispansernogo ucheta bol'nykh nervno-psikhicheskimi zabolevaniyami, 1962, 71 pp.  
HEW-NIH  
1-27-68

Fundamentals of Paleontology,  
RUSSIAN, bk, Osnovy paleontologii, Vol XI, 1964.  
CFSTI TT 66-51147

Changes in Physiology and Size of Ixodidae Ticks when Feeding Repeatedly on the Same Animals, by A. A. Kusatov, 6 pp.  
RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 288-292.  
JPRS 44094

Scientific  
Biological & Medical Sciences (Contd)

Specificity of Coccidia of Hypophthalmichthys Molitrix, Aristichthys Nobilis and Carps, by V. A. Musselius, V. I. Laptev, 8 pp.  
RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 333-338.  
JPRS 44094

Conference on Toxoplasmosis, by Ye. M. Kheysin, 5 pp.  
RUSSIAN, per, Parazitologiya, Vol 1, No 4, Jul/Aug 1967, pp 342-344.  
JPRS 44094

Transmission of the Tularemia Pathogen to Homothermal Animals by Ixodes Ticks, by K. I. Kondrashkina, A. D. Luk'yenova, 13 pp.  
RUSSIAN, per, Parazitologiya, Vol 1, No 5, Sep-Oct 1967, pp 405-411.  
JPRS 4405

On the Soviet Union Game Reservations, by A. G. Bannikov.  
RUSSIAN, bk, Po zapovednikam Sovetskogo soiuza. -- Moskva, Izdatel'stvo Mysl, 1966, 224 pp.  
\*CSFTI TT 68-50393

The Water Capacity of Peats, by A. A. Grebenshchikova.  
RUSSIAN, per, O vlagosmkosti torfov. -- Pochvovedenie, No 9, 1956, p 102.  
\*CSFTI TT 68-50407

Antifungal Activity of Pentachlorophenol and Salicylanilide, by Yu. P. Nukscha.  
RUSSIAN, per, Prikladnaya Biokhimiya i Mikrobiologiya, Vol 2, No 4, 1966, pp 469-474.  
\*ACSI J-4365  
ID 2204006668

Fruits From Pollinations, by J. Regia. 3 pp.  
RUSSIAN, per, Metakseniyakh u Chernogo Orekh. Priroda, Vol 39, No 11, 1950, pp 59-61.  
\*CFSTI TT 68-50415

Anomalous Flowering and Fruiting of Jublans Regia, by A. S. Tus, 2 pp.  
RUSSIAN, per, Anomal'noe tsvetenie i plodonoshenie greetskogo orekha. -- Priroda, Vol 47, No 5, 1958, pp 91-92.  
\*CSFTI TT 68-50416

Scientific  
Biological & Medical Sciences (Contd)

Use of Blood Hemoglobin as a Therapeutic Preparation, by M. M. Velikina.  
RUSSIAN, per, Problemy Gematologii i Perelivaniya Krovi, No 10, 1965, pp 47-54.  
\*ACSI J-4170  
ID 2204001768

The Radio Ecology of Marine Organisms, by G. G. Polikarpov, 246 pp.  
RUSSIAN, bk, Radiokologiya Morskikh Organizmov, 1964. P500025868-V  
Dept of Navy/NIC Trans No 2511

Radioecology of Marine Organisms, by G. G. Polikarpov.  
RUSSIAN, bk, Radiokologiya Morskikh Organizmov, 1964.  
Dept of Navy NIC 2511

Plants of Northern Siberia and Northern Far East, by A. I. Tolmachev.  
RUSSIAN, bk, Rasteniya severa sibir i dal' nego vostoka, Akademiya Nauk SSSR, Botanicheskiy Institut im V. L. Komarova, Rastitel'nost' Krainego Severa SSSR i ee osvoenie, Izdatel'stvo "Nauka" Moskva-Leningrad, 1966, 221 1/2 pp.  
\*CSFTI TT 68-50340

Two Short Notes on Diving Rates and Swimming Speed of Fish,  
RUSSIAN, per, Rybnoe Khoz., Vol 43, No 9, 1967, pp 86.  
\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

Prevention and Treatment of Alcoholism, by I. I. Loukanski.  
RUSSIAN, per, Seminar of WHO on Mental Hygiene, 1967, 14 pp.  
HEW-NIH  
1-22-68

Basic Trends in the Use of Cybernetics and Computers in Medicine in Certain Countries, by B. Dmitriyev, 11 pp.  
RUSSIAN, per, Sovetskoye Zdravokhraneniye, No. 12, Moscow, Dec 67, pp. 17-25.  
JPRS 44,355

Scientific  
Biological & Medical Sciences (Contd)

Simultaneous Application of Organic and Mineral Fertilizers, by E. M. Bodrova & Z. D. Ozolina.  
RUSSIAN, bk, Sovmestnoe primeneniye organicheskikh i mineral'nykh udobrenii, Rossel'khozizdat, Moskva, 1965, 141 1/2 pp.  
\*CSFTI TT 68-50334

English Title Unknown, by E. G. Perevalova, S. P. Gubin.  
RUSSIAN, per, Tartu. Universitet. Reaktsionnaya Spособnost' Organicheskikh Syedineniy, Vol 3, No 1(7), 1966, pp 68-88.  
\*FTD-HT-23-66-68

Permanent Bactericidal Finishes, by L. G. Gusakova and K. S. Viss-Mudretsova.  
RUSSIAN, per, Tekstilnaya Promyshlennost, No 4, 1961, pp 48-49.  
\*ACSI J-4248  
ID 2204002868

Theoretical Basis for Breeding of Livestock, by A. S. Vsyakikh.  
RUSSIAN, bk, Teoreticheskie osnovy plemennogo dela - Izdatel'stvo Kolos, Moskva, 1964, 431 pp.  
\*CSFTI TT 68-50331

The Theory of the Podsolization Process, by V. V. Ponomaryeva.  
RUSSIAN, bk, Teoriya Podsolobrazovatel'nogo protessa - Moskva, "Nauka", 1964, 380 pp.  
\*CSFTI TT 68-50442

Therapy in the Service of Soviet Health, by A.G. Gukasyan, 10 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, Moscow, No. 11, Nov 67, pp. 3-10.  
JPRS 44,223

Fifty Years of Soviet Hematology, by Prof. I.A. Kassirskiy, 10 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, No. 11, Moscow, Nov 67, pp. 15-21.  
JPRS 44,293

Fifty Years of Internal Medicine in Uzbekistan, by E.I. Atakhanov, 6 pp.  
RUSSIAN, per, Terapevticheskiy Arkhiv, Moscow, No. 11, Nov 67, pp. 29-33.  
JPRS 44,223

Scientific  
Biological & Medical Sciences (Contd)

Fifty Years of Soviet Clinical Gastroenterology, by A. Ya. Gubergrits, 9 pp.  
RUSSIAN, per, Terpevticheskiy Arkhiv, Moscow, No. 11, Nov 67, pp. 33-39.  
JPRS 44,223

Theoretical Fundamentals of the Biological Activity of Halogen Compounds, by V. O. Mokhnach.  
RUSSIAN, bk. Theoretical Fundamentals of the Biological Activity of Halogen Compounds, 1968. Plenum Press

Poplars and Their Culture, by P. L. Bogdanov.  
RUSSIAN, bk. Topolya i ikh kul'tura. -- Moskva, Lesnaya Promyshlennost, Ed 2, rev, 1965, 105 pp.  
\*CSFTI TT 68-50374

Expert Knowledge of Foodstuffs: Meat and its Products, by M. M. Danilov.  
RUSSIAN, bk. Tovarovedenie prodovol'stvennykh tovarov myaso i myasnye tovary, Izdatel'stvo Ekonomika, Moskva, 1964, 231 pp.  
\*CSFTI TT 68-50337

Cercariae of Strigeidae and Diplostomatidae, by T. A. Ginetinskaya & A. A. Dobrovolskii.  
RUSSIAN, per, Trudy Astrakhanskogo Zapovednika, Vol VI, 1962, pp 45-89.  
\*CSFTI TT 68-50391

Marine Fouling and Borers.  
RUSSIAN, bk. Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 49, 1961, 273 pp.  
\*CSFTI TT 68-50354

Ornithological Research on Government Reservations During Ten Year Period of 1945-55, by P. B. Yurgenson.  
RUSSIAN, per, Ornitologicheskie issledovaniya v gosudarstvennykh zapovednikakh za desyatiletie 1945-55 gg. -- Trudy Problemykh i Tematicheskikh Soveshchaniy ZIN, Pervaya Ornitolgicheskaya Konferentsiya, Vol 9, 1960, pp 48-51.  
\*CSFTI TT 68-50384

Ash (Fraxinus) Pollen (Morphology, Viability), by Z. V. Nikolaeva, 12 pp.  
RUSSIAN, per, Fil'tra yasenoi (morfologiya, zhidkaya-podobnost'), -- Tashkentskii Gosudarstvennyi Universitet im. V. I. Lenina. Nauchnye Trudy, Vol 204, 1962, pp 115-127.  
\*CSFTI TT 68-50430

Scientific  
Biological & Medical Sciences (Contd)

Report on Foot-and-Mouth Disease in Lambs, by V. A. Shubin.  
RUSSIAN, per, Patomorfologiya zlokachestvennogo vashchura yagnyat -- Trudy Vsesoyuznogo Instituta Eksperimental'no Veterinarii, Vol 24, 1961, 6 pp.  
\*CSFTI TT 68-50329

The Problem of the Toxicity of Complex Antigens and Possible Methods of their Detoxication, Report I. Theoretical Premises, by T. G. Vasil'yeva, 8 pp.  
RUSSIAN, bk. Vaktsiny i Syvorotki. Materialy po Proizvodstvu, No 6, 1966, pp 45-50.  
JPRS 44067

Bilateral Resection of the Parotid Glands with Preservation of the Branches of the Facial Nerve, by B. D. Kabakov, 3 pp.  
RUSSIAN, per, Vestnik Khir, Vol 98, No 3, Mar 1967, pp 106-107.  
Dept of Navy/NMS 1239

A Case of Benign Hemangioendothelioma of the Pancreas, by K. B. Zhrud', 3 pp.  
RUSSIAN, per, Vestn Rentgen, Vol 39, No 63, Sept-Oct 1964.  
Dept of Navy/NMS 1238

Development of Methods of X-Ray Diagnosis of Diseases of the Heart and Vessels in the USSR, by Prof. P.N. Mazayev, 9 pp.  
RUSSIAN, per, Vestnik Rentgenologii i Radiologii, Vol. 42, No. 6, Moscow, Nov-Dec 67, pp. 3-8.  
JPRS 44,312

Theoretical Conception of Mortality of Bark Beetles, by I. V. Pan'shin.  
RUSSIAN, per, O teoreticheskoi kontseptsii razvitiya i raznoobraziya korodov -- Vestnik Sel'skokhozyaistvennoi Nauki, Vol 7, No 3, 1962, pp 133-134.  
\*CSFTI TT 68-51402

A Parasite of Rusts of Cultivated Plants, Tuberculina Persicina (DITM) Sacc, by M. E. Vladimirovskaya, 8 pp.  
RUSSIAN, per, Parazit razvichivayetsya sel'skokhozyaistvennykh rastenii-Tuberculina Persicina (Ditm.) Sacc. -- Vestnik Razvichivayetsya Rastenii, No 1, 1939, pp 103-110.  
\*CSFTI TT 68-50417

Contractile Proteins of the Striated Muscles in Ontogenesis, by B. S. Kasavina.  
RUSSIAN, per, Vopred Khim, Vol 1, nos 1/2, 1949, pp 298-310.  
HEW-NIH  
1-4-68

Malignant Hemantionendothelioma of the Heart with Metastases to the Lungs, by V. I. Kovalenko.  
RUSSIAN, per, VOP Onkol, Vol 11, 1965, pp 90-91.  
\*Dept of Navy/NMS 1241

Properties of A, B, and Bunyamwera Arbor Viruses, by V.D. Neustroyev, et al, 6 pp.  
RUSSIAN, per, Voprosy Virusologii, No. 6, Moscow, Nov-Dec 67.  
JPRS 44,295

Development of Virus Biochemistry and Molecular Biology in the Soviet Union, by V.I. Tovar-nitskiy, 10 pp.  
RUSSIAN, per, Voprosy Virusologii, No. 6, Moscow, 1967, pp. 643-650.  
JPRS 44,197

Contemporary Data about Ways of Origin of Life, by A. I. Oparin, 26 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Zhizni vo Vseleynoy. Doklady na Soveshchaniy Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 4-21.  
P100030068-V  
FTD-MT-64-233

Special Clothing for Work in Warehouses, by G.A. Kobrits, 5 pp.  
RUSSIAN, per, Zashchita Rasteniy, Vol 12, No. 12, Moscow, Dec 67, pp. 37-38.  
JPRS 44,253

Disinfection of Fur Articles with Methyl Bromide, by A. G. Prischep.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii i Immunobiologii, No 8, 1964, pp 13-16.  
\*ACSI J-4346  
ID 22040C5368

The Importance of Rao, cereus in Human Pathology, by K. A. Akhundova, 8 pp.  
RUSSIAN, per, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 10, Oct 1967, pp 129-132.  
JPRS 44104

Fifty Years of Soviet Immunology, by M.A. Frolova, 12 pp.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii i Immunologii, No. 11, Moscow, 1967, pp. 39-45.  
JPRS 44,213

Antigenic and Immunogenic Properties of Staphylococcal Delta-Toxin, by Ye. V. Rusakova, 6 pp.  
RUSSIAN, journal, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No. 12, Moscow, 1967, pp. 114-118.  
JPRS 44,341

The Legal-Psychiatric Significance of Mental Anomalies, Not Excluding Responsibility, by D. R. Lunts.  
RUSSIAN, per, Zh Nevropat Psikhiat Korsakov, Vol 67, No 4, 1967, pp 605-608.  
HEW-NIH  
1-8-68

Autoradiographic Investigations of Nuclei of Root Meristem of Germinating Pea Seeds with the Employment of  $H^3$  - Thymidine, by Yu. F. Bogdanov & A. B. Iordanskii, 7 pp.  
RUSSIAN, per, Radioavtograficheskoe issledovanie vader kornevoi meristemy prorastayushchikh semyan gorokha s primeniyem timidina- $H^3$ . -- Zhurnal Obshchei Biologii, Vol 25, No 5, 1964, pp 357-363.  
\*CSFTI TT 68-50418

Certain Peculiarities of the Unconditioned Salivary Reflex in Dogs after Conditioned Light and Sound Stimuli of Various Strengths, by L. N. Andreyev, 9 pp.  
RUSSIAN, per, Zhurnal Vysshey Nervnoy Deyatel'nosti, Vol 15, No 3, 1965, pp 433-437.  
P100017968  
FTD-HT-67-456

New Data on the Reproduction of the Polar Bear, by E. IA. Kost'yan, 8 1/2 pp.  
RUSSIAN, per, Zoologicheskii Zhurnal, Moskva, Vol 33, No 1, 1954, pp 207-215.  
\*CSFTI TT 68-50386

Studying the Population and Migration Routes of Reindeer by Means of Aerial Methods, by V. N. Andreev.  
RUSSIAN, per, Issuchenie chislennosti severnykh oleney i putei ikh migratsii s pomoshch'yu aerometodov. -- Zoologicheskii Zhurnal, Vol 40, No 1, 1961, pp 117-121.  
\*CSFTI TT 68-50394



Scientific  
Biological & Medical Sciences (Contd)

Wild Carnivores of Siberia, by S. U. Stroganov.  
RUSSIAN, bk, Zveri sibirskikh khishchinye. Akademiya Nauk SSSR, Sibirskoe Otdelenie, Biologicheskii Institut, Izdatel'stvo Akademii Nauk SSSR, Moskva, 1962, 472 pp.  
\*CSFTI Tr 68-50349

Research in Biochemistry of the Nervous System in the Ukrainian SSR Since the Great October Revolution, by A.V. Palladin, 18 pp.  
UKRAINIAN, per, Ukrayins'kyi Biokhimichnyi Zhurnal, Vol 39, No. 5, Kiev, 1967, pp. 460-472.  
JPRS 44,365

In Defense of Our Fish Resources, by G. Vtachev.  
BULGARIAN, per, Priroda, No 5, Sep-Oct 1967, pp 111-116.  
\*ACSI J-4364  
ID2204006568

The Biological Secrets of the Sargasso Sea, by N. Iovchev.  
BULGARIAN, per, Priroda, No 5, Sep-Oct 1967, pp 111-116.  
\*ACSI J-4364  
ID 2204006568

Phonotaxis in Swarming Culex Mosquitoes, by Wang Chang-ling, and Yang K'o-hsuan, 5 pp.  
CHINESE, per, Jen-min Pao-chien, Vol 2, No. 6, June 1960, pp. 296-298 and 340.  
JPRS 44,408

Experiments with Biological Protection of Wood in Mines, by A. Priroda.  
CZECH, per, Ceska Mykologie, Vol 19, No 3, 1965, pp 175-179.  
\*ACSI J-4363  
ID 2204006468

Objective Recording and Evaluation of Physiological Deviations Occurring in Romberg Position and in Hautant Test, by B. Uchytil, 11 pp.  
CZECH, per, Es. Otolaryngologie, Vol XIV, No 2, 1965, pp 70-77.  
Dept of Navy/NNS 1230

Scientific  
Biological & Medical Sciences (Contd)

Effect of Freezing Speed Upon Bacteriological Conditions of Food Products, by J. Arpai & J. Tomisova.  
CZECH, per, Prumysl Potravin, No 11, 1967, pp 567-569.  
\*ACSI J-4322  
ID 2204004768

The Discharge of Poisoned Industrial Waster Waters in Great Britain, by G. E. Eden.  
FRENCH, rpt, Belgian Center for the Study and Documentation of Water, May 1965, No 258, pp 226-232. PS00378367  
Dept of Navy/NIC Trans No 2497

Multiple Trauma Victims, by R. Favre and P. Delacroix, 237 pp.  
FRENCH, bk, 1967, 237 pp.  
ACSI J-3720  
ID 2204053067

Characterization of Enzymatic Activities in Antigenic Extracts, by J. Uriel Tran Van Ky & F. Rose.  
FRENCH, per, Annales de l'Institut Pasteur 111, No 2, 1966, pp 161-170.  
Dept of Navy NIC tr 2515

Psychosomatic Complications in Some Cases of Severe Total Alopecia, by M. Degossely.  
FRENCH, per, Arch. Belg. Derm. Syph., Vol 21, Dec 1965, pp 257-266.  
\*Dept of Navy/NMS 1245

Seasonal Variations in the Blood Composition of the Dog, Role of the Supraoptical Posthypophyseal System in these Variations, by M. Bonvallet.  
FRENCH, per, C R Soc Biol (Paris), Vol 144, Nos 5-6, 1950, pp 383-386.  
HEW-NIH  
1-31-68

Biological Factors in Ethyl Poisoning Predisposing to Mental Disturbances, by A. Soulaire, 12 pp.  
FRENCH, per, Facteurs biologiques predisposant aux troubles mentaux par intoxication ethylique, 1965.  
Dept of Navy/NNS 1232

Symptoms, Diagnosis and Treatment of Bone Cysts, by J. M. Thomine.  
FRENCH, per, G. M. de France, Vol 2, No 1x, 1962, pp 2575-2578.  
\*Dept of Navy/NNS 1247

Scientific  
Biological & Medical Sciences (Contd)

Study of the Induction Mechanism in Syrian Hamster Cells Transformed by SV40 Virus. I. Properties of a Clonal Cell Line, by P. Tournier.  
FRENCH, per, Int J Cancer, Vol 2, 1967, pp 117-132.  
HEW-NIH  
1-24-68

Effect of Various Fixatives on the Permeability and Ultrastructure of the Urinary Bladder of Frog, by S. Jard.  
FRENCH, per, J Microscopie, Vol 5, Nos 31-50, 1966.  
HEW-NIH  
1-9-68

Biological Warfare.  
FRENCH, per, Le Progres Scientifique, pp 103-128.  
\*ACSI J-4345  
ID 2832022167

Design for Card, Accompanying Bottles of Blood, Intended for Pretransfusion Testing of the Sick at Bedside, by A. Jouvenceaux.  
FRENCH, per, Transfusion (Paris), Vol 8, No 3, 1965, pp 259-264.  
HEW-NIH  
1-2-68

The Donors of Rare Blood Groups. Organization of a Central Card File, by J. Moullec.  
FRENCH, per, Transfusion (Paris), Vol 8, No 4, 1965, pp 365-369.  
HEW-NIH  
1-26-68

Mortal Transfusion Accident in an A2 Subject, Due to Anti-A1 Antibodies, by N. Doitchinova.  
FRENCH, per, Transfusion (Paris), Vol 9, No 4, 1966, pp 327-331.  
HEW-NIH  
1-5-68

Experimental Carcinogenesis of the Thyroid in the Rat, by S. M. Milcu.  
GERMAN, per, Acta Biol Med German, Vol 3, No 6, 1959, pp 519-543.  
HEW-NIH  
1-21-68

Scientific  
Biological & Medical Sciences (Contd)

Studies on the Mechanism of Enzyme Induction in Rats and Mice. IV. Influence of Barbitol on the Anterior Pituitary Lobe - Adrenal Cortex System, by W. Klinger.  
GERMAN, per, Acta Biol Med German, Vol 15, No 3, 1965, pp 229-236.  
HEW-NIH  
1-35-68

Use of Several New Human Tumor Strains in Experimental Cancer Research, by D. M. Goldenberg.  
GERMAN, per, Arch Geschwulstforsch, Pt 1, Vol 29, No 1, 1967, pp 1-17.  
HEW-NIH  
1-30-68

Use of Some New Human Tumor Strains in Experimental Cancer Research, by D. M. Goldenberg.  
GERMAN, per, Arch Geschwulstforsch, Pt 2, Vol 29, No 1, 1967, pp 18-35.  
HEW-NIH  
1-23-68

Influence of Soil Micro-Organisms on Dry-Matter Formation and Ash Content of Plant Growth in Nutrient Solutions, by E. Welte and G. Trolldenier, 19 pp.  
GERMAN, per, Arch fur Mikrobiologie, No 43, 1962, pp 138-147.  
P911040268  
AEC-LB-G-2579

Influence of Soil Micro-Organisms on Rubidium and Calcium Uptake in Plants Growing in Nutrient Solutions, by G. Trolldenier, U. Marchwordt.  
GERMAN, per, Arch fur Mikrobiologie, No 43, 1962, pp 148-151.  
P911039668  
AEC-LB-G-2580

Cellular Regeneration in Eccrine Sweat Glands Before and After Stripping, by E. Christophers, O. Braun-Falco, 7 pp.  
GERMAN, per, Archiv fur Klinische und Experimentelle Dermatologie, No 228, 1967, pp 220-226.  
ACSI J-3945  
ID 2204059867

The Monomeric -Cyano-Acrylic Acid Butyl Ester, its Characterisation as to Polymerisation Kinetics, and the Development of a Preparation for Surgical Wound Agglutination, by H. Stricker, 10 pp.  
GERMAN, per, Archiv der Pharmazie, No 4, Apr 1967, pp 289-298.  
ACSI J-3651  
ID 2204051967

Modern Processes of Drying Foodstuffs - Their Influence on Quality and Storage, by G. Kluge.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 13.  
\*ACSI J-4326  
ID 2834022567

Preservation of Foodstuffs through Irradiation, by Dr. Diehl.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 29.  
\*ACSI J-4326  
ID 2834022567

Results of Long-Term Storage Tests of Foodstuffs, by B. Hottenroth.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 35.  
\*ACSI J-4326  
ID 2834022567

New Knowledge Concerning Long-Term Keeping Qualities of Stored Processed and Canned Meats and Sausages, by F. Wirth.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 47.  
\*ACSI J-4326  
ID 2834022567

Soldiers Bread, by A. Schulze.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 53.  
\*ACSI J-4326  
ID 2834022567

The Advantages of Cold Storage of Canned Food, by J. Gutschmidt.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 59.  
\*ACSI J-4326  
ID 2834022567

Cetaceae; Comparative Anatomical and Systematic Essay, by E. J. Slijper, 36 pp.  
GERMAN, per, Capita Zoologica, Vol VII, 1936. P500018768  
Dept of Navy/NIC Trans 2493

The Cephalopods. Systematics, by A. Naef.  
GERMAN, bk, Die Cephalopoden, Monographie, Fauna und Flora des Golfes von Neapel und der Angrenzenden Meeres-Abschnitte, Zoologischen Station zu Neapel, Berlin, No 35, Pt 1, No 1, 1921, 244 pp.  
\*CSFTI TT 68-50343/1

The Cephalopods. Systematics., by A. Naef.  
GERMAN, bk, Die Cephalopoden, Monographie Systematik, Fauna e Flora del Golfo Di Napoli, Stazione Zoologica di Napoli, Berlin, No 35, Pt 1, Vol 1, No 2, 1923, 718 pp.  
\*CSFTI TT 68-50343/2

Revision of the Palaearctic Yponomeutids with Particular Attention on the Genitals, by G. Friese.  
GERMAN, bk, Deutsches Entomologisches Institut der Deutschen Akademie der Landwirtschaftswissenschaften zu Berlin, Beitrage zur Entomologie, Akademie Verlag, Berlin, Band 10, No 1/2, 1960, 136 pp.  
\*CSFTI TT 68-50348

Theory of Sleep, by C. Von Economo.  
GERMAN, per, Ergebn Physiol, Vol 28, 1929, pp 312-339.  
HEW-NIH  
1-14-68

The Automatic Recording and Analysis of the Movement Activity of Small Experimental Animals, by F. J. Otto, K. H. Rohe.  
GERMAN, per, Examples of Applied Research Yearbook of the Fraunhofer Society, 1966-1967, pp 78-83.  
\*ACSI J-4408  
ID 2204007168

Scientific  
Biological & Medical Sciences (Contd)

Experimental Production of Malaria Crystallina,  
10 pp.  
GERMAN, bk, Monatshefte fur Praktische Dermatologie  
-- Über Experimentelle Erzeugung der Malaria  
Crystallina.  
ACSI J-3942  
ID 2204059767

Plant Protection in Central Europe, by F. Beran.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 97-  
99.  
\*ACSI J-4249  
ID 2204002968

The Importance of Applied Entomology in Austrian  
Plant Protection, by K. Russ.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 100-  
102.  
\*ACSI J-4249  
ID 2204002968

Phytopathological Problems in Austria, by G.  
Vukovits.  
GERMAN, per, Der Pflanzenart, No 9, 1967, pp 103-  
106.  
\*ACSI J-4249  
ID 2204002968

The Stomatopods, by H. Haiss.  
GERMAN, bk, Stomatopoda, Bronns, H. G. Klassen und  
ordnung des Tierreichs, B nd 5, Abteilung 1.  
Buch 6, Teil II, Akademische Verlagsgesellschaft  
m. b. H., Leipzig, 1938, 175 pp.  
\*CSFTI TT 68-50352

Dosimetric and Radiobiological Experiments with  
Fast Neutrons, I, by K. G. Zimmer, 16 pp.  
GERMAN, per, Strahlentherapie, No 63, 1938,  
pp 517-527.  
P911014768  
AEC NP-TR-1575

Mikrospermae Burmanniaceae and Orchidaceae, by  
H. Solereder & F. J. Meyer.  
GERMAN, per, Systematische Anatomie der  
Monokotyledonen, 11, Heft VI, Scitamineae -  
Mikrospermae, Verlag von G. Bruders Borntraeger.  
Berlin, 1930, pp 85-242.  
\*CSFTI TT 68-50344

Statokinetic Abnormalities in Children with  
Retarded Speech, by J. Langova, 4 pp.  
GERMAN, per, De Therapia vocis et Loquellas.  
1965.  
Dept of Navy/INS 1228

Scientific  
Biological & Medical Sciences (Contd)

Egg, Larval and Young Stages of Teleostei, by  
S. I. Bianco.  
GERMAN, bk, Uova, Larve e stadi giovanili di  
teleostei, Fauna e Flora Del Golfo Di Napoli  
Monogr. 38, Stazione Zoologica Di Napoli, Bardi  
G., - Roma - Friedlander R. & Sohn - Berlin.,  
Nos 1-2, 1931-1933, 454 pp.  
\*CSFTI TT 68-50346

The Histological Changes in the Human Heart  
After Injuries  
GERMAN, bk, Virchows Arch. f. path. anat., Vol  
252, 1924, pages 275-297  
Dept of Navy NIC 2315

Experimental Studies on Local Frostbite Pro-  
duced by Prolonged Exposure to Mild Freezing  
Temperatures, by Hellmuth Bottcher, 31 pp.  
GERMAN, per, Virchows Archiv. f. Path. Anat.,  
Vol 312, pp 464-485, 1944.  
P500019268  
Dept of Navy/NIC Trans No 2502

Removal of Radioactive Substances from the Skin,  
by Erich Hampe, 4 pp.  
GERMAN, per, Wehrtechnische Monatshefte, No 11,  
1965, pp 472-473.  
ACSI J-3165  
ID 2204036167

Neuraminic Acid-Containing Mucoids from Human  
Erythrocytes and Their Behavior Towards Various  
Enzymes, by G. Uhlenbruck.  
GERMAN, per, Zbl Bakt (Ref), Vol 177, No 3,  
1960, pp 197-219.  
HEW-NIH  
1-13-68

Birth Intervals and Their Significance for the  
Fertility and Health of Women, by Kh. Mehlan.  
GERMAN, per, Zbl Gynaek, Vol 85, No 24, 1963,  
pp 837-847.  
HEW-NIH  
1-25-68

The Gyro-Relaxation Effect, by A. Schluter.  
GERMAN, per, Zeitschrift fur Naturforschung,  
Vol 12a, 1957, pp 822-825.  
Dept of Navy/APL/JHU T-2100

Activation of Biopterin in the Rat, by H. Rembold.  
GERMAN, per, Z Naturforsch (B), Vol 22, 1967,  
pp 827-830.  
HEW-NIH  
1-34-68

Infrared Spectroscopic Investigation of Inclusion Compounds of Urea and Thiourea, by R. Hecke, W. Kutselnigg, 5 pp.  
GERMAN, per, Zeitschrift Fuer Analytische Chemie, Vol 170, No 1, 1959, pp 114-120.  
ACSI J-3163  
ID 2204035967

Notes on the Marine Ostracods of Sweden, by O. Elofson.  
GERMAN, bk, Zur kenntnis der marinen ostracoden schwedens. Universitet. Zoologiska Bidrag. Uppsala, 1941, 319 pp.  
\*CSFTI TT 68-50351

The Biological Problems of Space Travel, by S. Lukacs, 48 pp.  
HUNGARIAN, per, Az Urrepules es a Tudomany. 1962, pp. 103-150. P100009368  
FTD-HT-66-408

Tihany Institute of Biological Research Celebrates 40th Anniversary, by Janos Salanki, 8 pp.  
HUNGARIAN, per, Magyar Tudomany, Budapest, No. 12, pp. 790-794.  
JPRS 44,397

Impotence as a Complication of Pelvic Fracture, by Ugo de Santis.  
ITALIAN, per, Gazz. Int. Med. Chir., Vol 69, 1964, pp 1213-1217.  
\*Dept of Navy/NMS 1244

Diver Physiology Principles and Observations, by G. Albano.  
ITALIAN, bk, Laboratorio Internazionale di Medicina Subacquea.  
\* Dept of Navy NIC

Physiochemical studies on the human saliva  
JAPANESE, bk, Acta. Med., Fukuoka 35: 279-89, 1965, Igaku Kenkyu  
Dept of Navy NIC 2319

On the Benedenia Seriolae, by Toshikazu Hoshina.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 40-46.  
\*CSFTI TT 68-50600/2

Brief Notes on the Japanese Monogenetic Hematodes (Review), by Toshikazu Hoshina.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 47-57.  
\*CSFTI TT 68-50600/4

Larval Cestode (Tetrahynchidean Larva) Found in the Abdominal Cavity of Cultured Young Yellow-tail, by Kenji Nakajima.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, pp 76-83.  
\*CSFTI TT 68-50600/3

On the Spatial Distribution of Salmon by Means of the Analysis from the Catch of Fish per Unit Net, by Seikichi Mishima.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, Vol 31, No 4, 1965, pp 269-276.  
\*CSFTI TT 68-50600/1

Preference for the Rice Varieties, Sucking Portion of Host, Virus Acquisition in Laodelphax Striatellus (Fallen), by Y. Sonku & Y. Sakurai.  
JAPANESE, per, Chugoku Agricultural Research, No 32, 1965, pp 22-24.  
\*ACSI J-4347  
ID 2253030967

Myxosporidiosis of Japanese Eel, by Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 372-383.  
\*CSFTI TT 68-50600/6

Lentospore - Disease of the Eel, by S. Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 471-474.  
\*CSFTI TT 68-50600/8

Studies on Myxosporidian Parasites of Flat Fishes from Hokkaido, by T. Fujita.  
JAPANESE, per, Dobutugaku Zasshi, Vol 27, 1915, pp 487-491.  
\*CSFTI TT 68-50600/5

On a Myxosporidian Parasite Found in the Fin of Japanese Eel, by S. Ishii.  
JAPANESE, per, Dobutugaku Zasshi, Vol 28, 1916, pp 271-273.  
\*CSFTI TT 68-50600/7

Scientific  
Biological & Medical Sciences (Contd)

Culture Media for the Cholera Bacteria (From Isolation to Confirmation), by Riichi Sakagaki. JAPANESE, per, Modern Media [Special Publication], Vol 9, No 7, 10 July 1963, pages 6-11. Dept of Navy NIC 2320(a)

Tests of the "Makanishi Culture Medium" for the Isolation Culturing of Cholera Bacteria and Pathogenic Halophilic Bacteria (Kobayashi and Enomoto's Modified Medium (TCBS Agar)), by Toshikazu Kobayashi and Shuji Enomoto. JAPANESE, per Modern Media [Special Publication], Vol 9, No 7, 10 July 1963, pages 16-19. Dept of Navy NIC 2320

Chemical Studies of the Mechanism of Biosynthesis of Thyroxine, by T. Matsuura. JAPANESE, per, Nippon Kagaku Z., Vol 86, No 3, 1965, pp 282-293. HEW-NIH 1-6-68

A Review of Recent Studies on Free Histidine and its Derivatives in the Brain, by S. Tsunoo. JAPANESE, per, Shoun Igakkai Z., Vol 27, No 7, 1967, pp 523-535. HEW-NIH 1-1-68

The Seasonal Change of Gonad Weight of Sockeye and Chum Salmon in the North Pacific Ocean, Especially with Reference to Mature and Immature Fish, by Kenji Takagi. JAPANESE, per, Suisan Gakkaei Ho., Vol 7, 1937, pp 17-34. \*CSFTI TT 68-50600/11

Preliminary Report on the White Spot Disease in Marine Fish, by Y. Sikanu. JAPANESE, per, Suisan Gakkaei Ho., Vol 7, 1937, pp 149-165. \*CSFTI TT 68-50600/10

Application of Co Cr Prosthesis for Cases with Resection of Mandible, by Yasunobu Uchida, Toshiro Kanai. JAPANESE, per, Tokyo Medical College Journal. Vol 22, Nov 1964, pp 517-524. \*ACSI J-4338 ID 2204005668

Scientific  
Biological & Medical Sciences (Contd)

Mercurimetric Determination of Thiol Esters, by M. Wronski. POLISH, per, Chemica Analytyczna, Vol 11, No 6, 1966, pp 1153-1157. HEW-NIH 1-29-68

Frozen Fish-Storage. I.A. Method of Quantitative Drip Determination in Frozen Fish, by Zbigniew Podaszewski. POLISH, per, E. Zeszyty Naukowe Wyzszej Szkoły Rolniczej w Szczecinie, No 22, 1966, pp 127-139. \*CSFTI TT 67-56124/89

Sanitary and Epidemiological Defense Against Biological Mass Destruction Weapons. POLISH, per, Lekarz Wojskowy, No 9, 1966, pages 773-775. \*Dept of Navy NIC

A Case of Kasabach-Merritt Syndrome, by Henryk Ficek. POLISH, per, Pediat. Pol., Vol 1, No 40, Dec 1965, pp 1409-1412. \*Dept of Navy/NMS 1246

Toxic Hepatitis in the Course of Anti-Schistotomosis Treatment with Antimonial Agents, by F. G. Alvariz, 16 pp. PORTUGUESE, per, O Hospital, Vol 67, No 3, 1965, pp 451-466. Dept of Navy/NMS 1233

A Brief History of Soviet Veterinary Medicine, by S. Rapic, 16 pp. SERBO-CROATIAN, journal, Veterinarski Arhiv, No. 11-12, Zagreb, 1967, pp. 335-347. JPRS 44,214

Repercussions of Population Explosion in Mexico on the Children, by Andres G. De Wit Greene, 29 pp. SPANISH, per, Revista Medica, 1222 T E, Sept-Oct 1966, pp 42-56. Dept of Navy/NMS 1235

Some Notes on Chondrogenesis of the Trachea and on Irregular Orientation of the Esophagus, by G. Fleischmann. SWEDISH, per, Erlangen, 1820, 48 pp. HEW-NIH 1-11-68

Donor Registration and Electronic Data Processing, by E. Freiesleben. SWEDISH, per, Ugeskr Laeg, Vol 127, 1965, pp 1171-1176. HEW-NIH 1-10-68

Handbook of the Physicochemical Properties of the Elements. 850 pp.  
RUSSIAN, bk, 1967.  
Plenum Press Data Division

Organic Insertion Reactions of Group IV Elements, by E. Ya. Lukevits, M. G. Voronkov. 413 pp.  
RUSSIAN, bk, 1966.  
Consultants Bureau

Synthesis of Organosilicon Monomers, by A. D. Petrov, V. F. Mironov, et al. 492 pp.  
RUSSIAN, bk, 1964.  
CONSULTANTS BUREAU

Problems of Geochemistry. Jubilee Collection Dedicated to 70th Anniversary of Acad. A. P. Vinogradov.  
RUSSIAN, bk, Akademiya Nauk SSSR. Institut Geokhimii i Analiticheskoi Khimii imeni V. I. Vernadskogo, Moskva, Izdatel'stvo Nauka, 1965, 688 pp.  
\*CSFTI TT 68-50450

Comparative Effect of Apolidine and Atropine on the Toxicity of Some Organophosphorus Compounds, 4 pp, by K.A. Zaytseva.  
RUSSIAN, per, Farmakologiya i Toksikologiya, Vol 30, No. 5, Moscow, Sept-Oct 67, pp. 597-599.  
JPRS 44,290

Physical Chemistry of the Positron and Positronium, by V. I. Gol'danskiy.  
RUSSIAN, bk, Fizicheskaya Khimiya Pozitrona i Pozitroniya, 1968.  
Plenum Press

Changes in the Optical Characteristics of Phosphors with Change in Base Component Ratio, by V. L. Levashin, R. K. Pirinchiyeva.  
RUSSIAN, per, Fizika Astarodniya, No 5, 1967, pp 17-21.  
ACSI J-3935  
ID 2204059267

Physico-Chemical Basis of the Process of Gluing and Adhesion, by N. I. Moskvitin.  
RUSSIAN, bk, Fiziko-khimicheskie osnovy protsessov skleivaniya i prilipaniya -- Moskva. Lesnaya Promyshlennost', 1964, 248 pp.  
\*CSFTI TT 68-50368

Study of the Composition of Terpene Hydrocarbon Mixtures by the Method of Gas Liquid Chromatography, by B. K. Baboshin, 2 pp.  
RUSSIAN, per, Issledovanie sostava smesii terpenov-khuglevodivodov metodom gazo-zhidkostnoi khromatografii. -- Girdroliznaya i Lesokhimicheskaya Promyshlennost', Vol 16, No 4, 1963, pp 14-15.  
\*CSFTI TT 68-50413

Oxidation of unsaturated Compounds with Organic Peroxides, by N. Prilezhayev, 43 pp.  
RUSSIAN, per, Journal of the Russian Physical Chemistry Society, Vol 42, 1910, pp 1387-1418.  
500019168  
Dept of Navy/NIC Trans No 2478

Oxidation of Unsaturated Compounds with Organic Peroxides, by N. Prilezhayev, 16 pp.  
RUSSIAN, per, Khimich. Obshch., Vol XLIII, No 4, pp 609-620  
P500019568  
Dept of Navy/NIC Trans No 2485

Oxidation of Unsaturated Compounds by Organic Peroxides, by N. Prilezhayeva, 47 pp.  
RUSSIAN, per, Khimicheskoye Obshchestvo, Vol 44, 1912, pp 613-647.  
P500032568  
Dept of Navy/NIC Tr No 2520

The Chemical Industry of the German Democratic Republic, by B. M. Berezov, 9 pp.  
RUSSIAN, per, Khimicheskaya Promyshlennost', No 3, 1967, pp 74-77.  
DIA LN 335-67

The Development of the Production of Pesticides in the Soviet Union, by N.N. Mel'nikov, 8 pp.  
RUSSIAN, journal, Khimicheskaya Promyshlennost', Moscow, No. 11, 1967, pp. 870-872.  
JPRS 44,340

Determination of the Heats of Formation of Indium and Gallium Phosphide by the Method of Combustion in a Oxygen-Bomb Calorimeter, by Ye.N. Yermolenko and N.N. Sirota, 2 pp.  
RUSSIAN, per, Khimicheskaya Svyaz' v Poluprovodnikakh i Tverdykh Tselakh. Nauka i Tekhnika, Minsk, 1965, pp. 128-129. P100006668  
FTD-MT-23-534-67

Scientific  
Chemistry (Contd)

Efficiency of Helium Liquefaction Cycles, by I. B. Danilov.  
RUSSIAN, per, Khimicheskoye Mashinostroyeniye, No 2, 1964, pp 5-9.  
\*FTD-MT-24-38-68

Influence of Certain Physicochemical Properties of Petroleum Emulsions on Their Phytocidal and Toxic Properties, by V. S. Lukanina, V. K. Unterberger, 7 pp.  
RUSSIAN, per, Khimiya v Sel'skom Khozyaystve, No 5, 1964, pp 23-30.  
P100017363  
FTD-HT-67-231

The Effect of Fillers on the Thickening Power of Lithium Soaps, by I. G. Fuks, V.V. Vaynshtok, 6 pp.  
RUSSIAN, per, Khimiya i Tekhnologiya Topliv i Masel, No 2, 1966, pp 24-26.  
P100013963  
FTD-HT-67-225

Investigation of the Structure of Cured Epoxy Resins from Equilibrium Swelling and Conversation of the Epoxy Groups, by M. M. Tarnorutskiy and M. I. Tikhonenko, 8 pp.  
RUSSIAN, per, Kolloidnyy Zhurnal, Vol 28, No 6, 1966, pp 876-880.  
ACSI J-3938  
ID 2204059467

Chemical Processes in a Low-Temperature Plasma, by L. S. Polak.  
RUSSIAN, rpt, Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkoterturnoy Plazmy, 1965, pp 546-566.  
\*FTD-MT-24-58-68

The Possible Participation of Growth Stimulants and Nucleic Acids in the Mechanism of the Action of Phytochrome, by M.B. Shternberg, 47 pp.  
RUSSIAN, bk, Regulyatory rosta rasteniy i nukleinovyy obmen, 1965, pp 65-102.  
P500019063  
Dept of Navy/NIC Trans No 2317

Scientific  
Chemistry (Contd)

Intense Microwave Radiation from a Dense, Unstable Plasma, by T. H. Jensen, F. R. Scott.  
RUSSIAN, per, Trudy International Congress on Theoretical and Applied Chemistry, 20th, International Symposium on Properties and Applications of Low-Temperature Plasma, Moskva, USSR, 15-17 Jul 1965, pp 17-25, 111-120.  
\*FTD-MT-24-58-68.

Simple Chemical Reactions in Plasmas, by W. Loechte.  
RUSSIAN, rpt, Trudy Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkoterturnoy Plazmy, Moskva, USSR, 15-17 Jul 1965, 1967, pp 35-39.  
\*FTD-MT-24-58-68

Experiments and Results of Measurements of Low-Temperature Plasma Conductivity, by A. Kordus.  
RUSSIAN, rpt, Trudy Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkoterturnoy Plazmy, Moskva, USSR, 15-17 Jul 1965, pp 229-238.  
\*FTD-MT-24-58-68

Microwave Resonance Measurements of Average Densities, by P. E. Vandenplas.  
RUSSIAN, rpt, Trudy Mezhdunarodnyy Kongress po Teoreticheskoy i Prikladnoy Khimii, 20th, Mezhdunarodnyy Simpozium po Svoystvam i Primeneniyu Nizkoterturnoy Plazmy, Nizkoterturnaya Plazmy, Moskva, Jul 15-17 1965, 1967, pp 303-313.  
\*FTD-MT-24-58-68

Phase Diagrams of Systems of Hydrogen with Titanium, Zirconium, Vanadium and Niobium, by G. V. Samsonov and M. M. Antonova, 10 pp.  
RUSSIAN, per, Ukrainskiy Khimicheskii Zhurnal, Vol 32, No 6, 1966, pp 555-559.  
P100017063  
FTD-HT-23-925-67

Storage of Chemical Substances, by Ka.A. Panafidin, 5 pp.  
RUSSIAN, per, Zashchita Rasteniy, Vol 12, No. 12, Moscow, Dec 67, pp. 35-36 and 37-38.  
JPRS 44,253



Scientific  
Chemistry (Contd)

Electron Distribution in Cations of Triarylmethane  
Dyes and Extractability of Ionic Associates, by  
S. A. Lomonosov.  
RUSSIAN, per, Zh Analit Khim, Vol 22, No 8,  
1967, pp 1125-1141.  
HEW-NIH  
1-28-68

Bactericidal Effect of Sodium Metasilicate, by  
F. A. Shakhbazyan.  
RUSSIAN, per, Zhurnal Mikrobiologii Epidemiologii  
i Immunobiologii, No 6, 1962, pp 119-121.  
\*ACSI J-4413  
ID 2204007668

Preparation of Phosphorus Alkyl (Aryl)  
Trifluoromono-hydrates, by S. Z. Ivin.  
RUSSIAN, Patent No 181109.  
\*FTD-HT-23-137-68A

A Method for Obtaining Nitric Acid, by  
G.A. Skvortsov, M.M. Karavayev, et al., 2 pp.  
RUSSIAN, patent, Patent No. 183194 (Appl.  
No. 893995/23-26, April 13, 1964, 2 pp.  
P100007068  
FTD-HT-23-953-67

High Polymer Chemistry and Physics, by  
Cheng-tu Kung & Hsueh Yuan.  
CHINESE, per, High Polymer Chemistry and Physics,  
pp 143-170.  
\*ACSI J-4344  
ID 2204005268

Chemistry in Photography, by H. J. Fijn Van Drecht.,  
DUTCH, per, Chemie and Techniek Revue, Vol 21, No  
13, 1966, pp 457-461.  
\*ACSI J-4358  
ID 2204006068

Characterisation of Enzymatic Activities in Anti-  
genic Extracts from *Aspergillus Fumigatus* after  
Agar Electrophoresis and Immunoelectrophoresis,  
by Tran Van Ky, J. Uriel, 17 pp.  
FRENCH, per, Annales de l'Institut Pasteur, Vol  
111, No 2, 1966, pp 161-170. P500025068  
Dept of Navy/NIC Tr No 2515

Scientific  
Chemistry (Contd)

The Analytical Applications of the  $(t, n)$  Reaction,  
by J. Adloff, J. Schleiffer, 13 pp.  
FRENCH, per, Bull Soc Chem, No 2, 1966, pp 698-  
703.  
P911042368  
AEC ANL-TR-543

Thermal Decomposition of Barium Oxide Single  
Crystals, I. The Formal Kinetics of the Decompo-  
sition of Barium Oxide Single Crystals, by  
K. Tohar, H. T. Spath.  
GERMAN, per, Monatschrift fur Chemie, Vol 98, No 5,  
1967, pp 1696-1711.  
\*NASA TT F-11,594

The Effect of Particle Size on the Mechanism of  
Solid State Reactions, by W. Feitknecht, 27 pp.  
GERMAN, per, Pure and Applied Chemistry, No 8-9,  
1964, pp 423-440.  
ACSI J-3749  
ID 2204054267

The Reaction of Fillers with Polymer Solutions,  
by A. B. Taubman, S. N. Tolstaja, 14 pp.  
GERMAN, rpt, Second International Symposium on  
Glass Fiber Reinforced Plastics, Mar 13-17,  
1967, pp D2/1-D2/7. P500019368  
Dept of Navy/NIC Trans No 2504

Reaction Experiments With Mixtures of Active  $Fe_2O_3$   
and  $CaO$  in the Solid State, by J. Arvid Hedvall  
and S. O. Sandberg.  
GERMAN, bk, Zeitschrift fur anorganische und  
allgemeine Chemie, Vol 240, 1938, pages 15-20.  
Dept of Navy NIC 2496

Optical Investigations on Electrochemically  
Activated and Passivated Metallic Reflectors,  
by L. Tronstad, 48 pp.  
GERMAN, per, Zeitschrift fur Physikalische Chemie,  
Series A, Vol 142, No 4, 1929.  
ACSI J-3507  
ID 2204048067

Chlorates and Perchlorates of Cobalt Ammine  
Complexes, by R. Salvadori, 19 pp.  
ITALIAN, per, Gazz Chim Ital, No 40, Pt 2,  
1909, pp 9-18.  
P911041468  
AEC-TR-6926

Scientific  
Chemistry (Contd)

Inorganic Chromatographic Adsorption, Part I,  
by Luigi Sacconi, 17 pp.  
ITALIAN, per, Gazz Chim Ital, No 78, 1948, pp 583-  
589.  
P911041068  
AEC-TR-6924

Inorganic Chromatographic Adsorption - Part II,  
the Buffering Action of the Surface of Activated  
Alumina, by Luigi Sacconi, 20 pp.  
ITALIAN, per, Gazz Chim Ital, No 79, 1949, pp  
141-152.  
P911041368  
AEC-TR-6925

Ternary Oxides of 3-7-Valent Technetium with  
Alkalies, by Basil Kanellakopoulos, 33 pp.  
GERMAN, rpt, KFK 197, Kernforschungszentrum  
Karlsruhe, Feb 1964, 67 pp.  
P911016468  
AEC ANL-TR-539

Method for the Separation of Trivalent Lanthanides  
from each other or from Yttrium by Partition.  
GERMAN, Patent Specification 1,052,968, Supple-  
ment to the Patent 957,478, 9 pp.  
P911040968  
AEC-TR-6922

Spectrophotometric Determination of Titanium in  
Ferro-Niobium with Diantipyrilmethane, by  
R. Kajiyama.  
JAPANESE, per, Bunseki Kagaku, Vol 16, No 9,  
1967, pp 908-12.  
\*NASA TT F-11,586

Synthetic Stabilizers for Photographic Emulsions,  
Part 6, The Effect of Phenyltetrazoles on Photo-  
graphic Emulsions, by K. Murofuku, H. Ichido,  
11 pp.  
JAPANESE, per, Kogyo Kagaku Zasshi, No 57, 1954,  
pp 232-234.  
P911044168  
AEC-TR-6923

The Rate of Quaternization of Pyridine with  
Dodecyl Bromide in Hydroxylic Solvents, by K.  
Murai and C. Kimura.  
JAPANESE, per, Kogyo Kagaku Zasshi, Vol. 68, No  
11, 1965, pp 2093-2096.  
\*ACSI J-4280  
ID 2204003368

Scientific  
Chemistry (Contd)

Effect of Ethylene Oxide on Some Wood Destroy-  
ing Fungi, by R. E. Kowalik, I. Sadurska.  
POLISH, per, Acta Microbiologica Polonica, Vol  
9, No 1, 1960, pp 67-69.  
\*ACSI J-4357  
ID 2204005968

Control of Butyric Swelling in Fermented Cheeses,  
by Carol Toma.  
RUMANIAN, per, Industria Alimentara, Vol 18, No  
12, 1967, pp 576-580.  
\*ACSI J-4416  
ID 2204007968

Prevention of Fungi Appearance on Sausage Casing  
Surface, by R. Zivanovic.  
CROATIAN, per, Tekhnologija Mesa, No 11, 1967,  
pp 314-316.  
\*ACSI J-4321  
ID 2204004668

Earth Sciences & Oceanography

Electrical Properties of Rocks, by  
Eleonora I. Parkhomenko. 314 pp.  
RUSSIAN, bk, May 1967  
Plenum Press

Problems in Deep Seismic Sounding. 166 pp.  
RUSSIAN, bk, Apr 1967  
Consultants Bureau

Seismic Love Waves, by Zoya S. Andrianova,  
Milita G. Neigauz. 91 pp.  
RUSSIAN, bk, Feb 1967.  
Consultants Bureau

Introduction and Acclimatization of Nut Trees in  
Latvian SSR, by A. Ozol, 3 pp.  
RUSSIAN, per, Introduktsiya i akklimatisatsiya  
orekov v Letvliiskoi SSR. -- Akademiya Nauk  
Letvliiskoi SSR. Otdelenie Biologicheskikh Nauk.  
Biologicheskaya Nauka, Sel'skoy i Lesnomu  
Khozyaistvu, Vol 3, 1957, pp 71-73.  
\*CSFTI TT 68-50404

Western Siberia, by G.D. Rikhter, 6 pp.  
RUSSIAN, journal, Akademiya Nauk SSSR, Insti-  
tut Geografii, Moscow 1963, pp. 129-134.  
Dept of Navy NOO tr 347

Scientific  
Earth Sciences & Oceanography (Contd)

Processes of Recent Sedimentation in the Bering Sea, by A. P. Lisitsyn.  
RUSSIAN, bk, Academy of Sciences of the USSR  
Dept. of Earth Sciences, Commission of Sedimentation,  
Institute of Oceanology. Izdat. "Nauka" Moscow,  
1966, 584 $\frac{1}{2}$  pp.  
\*CSFTI TT 68-50315

Brown Forest and Brown Pseudopodzolic Soils in the Northwest Region of the USSR, by S. V. Zonn, 21 pp.  
RUSSIAN, per, O burykh lesnykh i buropsevdopodzolistykh pochvakh Severo-zapada. -- Sbornik Nauchnykh Trudov Estonskoy Sel'skokhozyaystvennoy Akademii, Trudy Po Pochvo Vedeniyu, Tartu, Vol 4, 1966, pp 112-132.  
\*CSFTI TT 68-50445

Genesis of Soils of Western Siberia.  
RUSSIAN, bk, Genezis pochv zapadnoy Sibiri. -- Trudy Biologicheskogo Instituta, Vyp 12. Redaktsionno-Izdatel'skii Otel. Sibirskogo Otdeleniya AN SSSR, 1964, 220 pp.  
\*CSFTI TT 68-50438

Geography and Classification of the Soils of Asia, by V. A. Kovda & E.W. Lobova.  
RUSSIAN, bk, Geografiya i klassifikatsiya pochv Asii. -- Izdatel'stvo "Nauka", Moskva, 1965, 260 pp.  
\*CSFTI TT 68-50439

Geology and Mineral Resources of Cuba, by Yu. M. Pushcharovskiy, 191 pp.  
RUSSIAN, bk, Geologiya i Poleznye Iskopayemye Kuby, 1967.  
\*ACIC TC-1381

Scheme of the Composite Utilization of Water Resources of the Lena River, by V. F. Yarosh, 8 pp.  
RUSSIAN, per, Gidrotekhnicheskoe Stroitel'stvo, No 1, 1966, pp 1-8.  
\*CSFTI TT 68-50380

Seventh Cruise D/S "OB" 1961-1962.  
RUSSIAN, bk, Glavnoe Upravlenie Gidrometeorologicheskoi Sluzhby Pri Sovete Ministrov SSSR. Arkticheskii i Antarkicheskii Nauchno-Issledovatel'skii Institut. Trudy Sovetskoi Antarkicheskoi Ekspeditsii, Tom 44 Nauchnye Rezul'taty i Materialy Nablyudeni Gidro. Leningrad, 1965, 223 pp.  
\*CSFTI TT 68-50312

Scientific  
Earth Sciences & Oceanography (Contd)

Deep-Seated Structure and History of the Tectonic Development of the Vilyuy Basin, by G. I. Shtekh.  
RUSSIAN, bk, Glubinnoye Stroyeniye i Istoriya Tektonicheskogo Razvitiya Vilyuykov Vpadiny, 1965, 124 pp.  
ACIC TC-1221

Mountains of the Central Part of the Queen Maud Land (Eastern Antarctica), by V. I. Bardin.  
RUSSIAN, bk, Gory tzentral'noi zemli korolevy mod - Vostochnaya Antarktida) Glaciology IX Section of IGY Program No 15, Moscow, 1966, 119 pp.  
\*CSFTI TT 68-50314

Geological Factors Forming Gravity Anomalies and Isostatic Disturbances, by A. A. Borisov.  
RUSSIAN, rpt, International Geological Congress, XII Session, Reports of Soviet Geologists, Problem 12 Isostasy, 1964, pp 57-59.  
ACIC TC-1275

Sown Winter Ranges in the Middle Asia Foothill Deserts (The Experiment of Creation of Artificial Phytocenoses), by N. I. Mechaeva & S. Ya. Prikhod'ko.  
RUSSIAN, bk, Iskusstvennye zimnie pastbishcha v predgornnykh pustynnykh srednei asii (opyt sozdaniya iskusstvennykh fito-geozov). -- Akademiya Nauk Turkmenskoi SSR, Inst Pustyn'/Inst Botaniki, Ashkhabad, 1966, 227 pp.  
\*CSFTI TT 68-50363

Cartography, by L.S. Garayevskaya, 12 pp.  
RUSSIAN, per, Izdatel'stvo Geodezicheskoi Literature, Moscow 1955, pp. 143-155, Dept. of Navy NOO tr 320

Lithogenesis of Plastic Clay Sediments in Seas, by M.M. Yermolayev, 8 pp.  
RUSSIAN, per, Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, No. 1, 1948, pp. 121-128.  
Dept of Navy NOO tr 355

Some Characteristics of Thermics and Currents of the Sea of Japan, by A.K. Leonov, 21 pp.  
RUSSIAN, per, Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva, Vol. 90, No. 3, Leningrad 1958, pp. 244-264.  
Dept of Navy NOO tr 358

Scientific  
Earth Sciences & Oceanography (Contd)

Microanistropy of Water Saturated Sands, by L. V. Gorelik & A. A. Petrenko, 6 pp.  
RUSSIAN, per, Izvestiya Vessoluznogo Nauchno-Issledovatel'skogo Instituta Gidrotekhniki, Vol 76, 1964, pp 299-304.  
\*CSFTI TT 68-50381

Climatic Ecotypes of Quercus Robur in European Russia, by S. A. Rostovtsev, 34 pp.  
RUSSIAN, per, Klimaticheskie ekotipy duba chereschatogo v evropeiskoi chasti (SSR), -- Vsesoyuznyi Nauchno-Issledovatel'skii, Instituta Lesovodstva i Mekhanizatsii-Lesnogo Khozyaistva, Sbornik Rabot po Lesnomu Khozyaistvu, No 40, 1960, pp 62-94.  
\*CSFTI TT 68-50411

Mechanical Properties of Rocks, by A. A. Skochinskogo  
RUSSIAN, bk, Mekhanicheskie svoistva gornykh porod. -- Moskva, Izd-vo Akademii Nauk SSSR, Gosudarstvennyi Komitet po Toplivoi Promyshlennosti pri Gosplane SSSR. Institut Gornogo dela im, 1963, 168 pp.  
\*CSFTI TT 68-50377

Modern Trends in the Development of Instruments and Methods for Deep-Sea Investigations, by A.G. Kolesnikov, et al, 12 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protessov v Okeane, Marine Hydrophysical Institute, Vol 36, Kiev 1966, pp. 3-14.  
Dept of Navy NOO tr 375

Instruments for Measuring Turbulent Pulsations of Current Velocity and Temperature at Great Depths, by A.G. Kolesnikov, et al., 11 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 15-25.  
Dept of Navy NOO tr 376

Application of Spectrographic Methods in Nuclear Hydrophysics, by B.A. Nelepo, and V.I. Romanov, 5 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 26-30.  
Dept of Navy NOO tr 377

Scientific  
Earth Sciences & Oceanography (Contd)

Apparatus for Measuring the Intensity of Cosmic Rays at Great Depths, by Yu. N. Vavilov, et al, 6 pp.  
RUSSIAN, per, Metody i Pribory Dlya Issledovaniya Fizicheskikh Protessov v Okeane, Marine Hydrophysical Institute, Vol. 36, Kiev 1966, pp. 31-36.  
Dept of Navy NOO tr 378

Gravitational Field of the Atlantic Ocean and its Connection with the Abyssal Structure of the Earth's Crust, by Ye. D. Koryakin.  
RUSSIAN, per, Morskoye Kavitatsionnyye Issledovaniya, Issue 2, 1958-1960, pp 36-50.  
ACIC TC-1273

Atlas of Hydrological Characteristics of the NW Part of the Black Sea, by K.A. Vinogradov, et al., 15 pp.  
RUSSIAN, bk, Atlas, Naukovaya Dumka, Kiyev, 1966, pp. 1-14 and 79 Charts.  
Dept of Navy NOO tr 362

New Theories of Podzolization and Solodization of Soils, by A. A. Rode, 96 pp.  
RUSSIAN, bk, Novoe v teorii opodzolaniya i osolodeniya pochv. -- Moskva, "Nauka", 1964, 96 pp.  
\*CSFTI TT 68-50440

Essays from the History of Applied Entomology in Russia, by L. V. Chesnova.  
RUSSIAN, bk, Ocherki iz istorii prikladnoi entomologii v rossii -- Akademiya Nauk SSSR, Institut Istorii Estestvoznaniya i Tekhniki, Izdatel'stvo Akad. Nauk SSSR, Moskva, 1962, 132 pp.  
\*CSFTI TT 68-50362

Characteristics of the Distribution of Water Temperature and Salinity in the North Pacific Ocean, by S. G. Panfilova, 8 pp.  
RUSSIAN, journal, Okeanologicheskiye Issledovaniya, No. 13, Moscow, 1965, pp. 47-54.  
Dept of Navy NOO tr 289

Benthic Biocoenoses of the Western Half of the Black Sea, by K.A. Vinogradov and V.P. Zakutskiy, 4 pp.  
RUSSIAN, Okeanologiya, Vol. VI, No. 2, 1966, pp. 340-343.  
Dept of Navy NOO tr 353

Scientific  
Earth Sciences & Oceanography (Contd)

Keys for Marine Dinoflagellates, by I. A. Kiselev, 281 pp.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR  
Pantsyrnyye Zhgutikonostsy (Dinoflagellata)  
Morev i Presnykh VOD SSSR, 1950, pp. 1-280.  
\*Dept of Navy NOO tr 388

Fishes of the Sea of Japan and the Adjacent  
Areas of the Sea of Okhotsk and the Yellow Sea,  
Part 1, by G. U. Lindberg, M. I. Legeza.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR. Izdav-  
ayemye Zoologicheskimi Institutom Akademii Nauk  
SSSR. Teleostomi XII. Acipenseriformes. Poly-  
nemiformes. Izdat. "Nauka" Moskva, No 68, 1959.  
CSFTI TT 67-51392

Fishes of the Japanese Sea and Adjacent Parts  
of the Okhotsk and Yellow Seas. Part 2., by  
G. U. Lindberg & M. I. Legeza.  
RUSSIAN, bk, Opredeliteli Po Faune SSSR.  
Izdavaemye Zoologicheskimi Institutom Akademii  
Nauk SSSR. Teleostomi XII. Acipenseriformes.  
Polynemiformes. Izdat. "Nauka" Moskva, No 84,  
Pt 2, 1965, 390 pp.  
\*CSFTI TT 68-50361

Basic Studies on Soil Moisture, by A. A. Rode,  
664 pp.  
RUSSIAN, bk, Osnovy ucheniya o pochvennoi vlage --  
Gidrometeorologicheskoe Izdatel'stvo, Leningrad,  
Vol 1, 1965.  
\*CSFTI TT 68-50441

The Problems and Nature of Investigations of Soils  
of Bog and Swamp Territories for Purposes of  
Planning Reclamation by Drainage, by P. G. Fialkovskii  
& V. I. Shrag, 3 pp.  
RUSSIAN, per, Zadachi i sodержanie issledovani  
pochv bolotnykh i zabolochennykh osushitel'nykh  
meropiyati, -- Pochvovedenie, No 4, 1955,  
pp 82-84.  
\*CSFTI TT 68-50405

Determination of the Density of the Peat Grounds,  
by F. R. Zaidel'man, 2 pp.  
RUSSIAN, per, Opreделение obiemnogo vesa  
torfyanistykh pochvo-gruntov, -- Pochvovedenie,  
No 5, 1955, pp 76-77.  
\*CSFTI TT 68-50406

Donets Basin Coal Mining Evaluated, by  
V. Kipot', 5 pp.  
RUSSIAN, newspaper, Pravda Ukrainy, Kiev,  
6 Jan 68, p. 2.  
JPRS 44,337

Scientific  
Earth Sciences & Oceanography (Contd)

The Water Exchange Between the East Siberian  
and Chukchi Seas Through Prolif Long--Long  
Strait, by Yu. A. Gorbunov, 6 pp.  
RUSSIAN, per, Problemy Arktiki, No. 1,  
1957, pp. 35-40.  
Dept of Navy NOO tr 351

On the Geological Nature of the Gravity Anomalies  
in line of the Sections of the Eastern Ciscaucasus,  
by B. A. Bryusov, A. V. Dul'nev.  
RUSSIAN, per, Razvedochnaya Geofizika, No 17,  
1966, pp 71-74.  
\*ACIC TC-1384

On the Correlation Between the Accuracy of Anomaly  
Determination and Network Density in Gravimetric  
Surveying, by A. K. Malovichko, M. S. Chadayev.  
RUSSIAN, per, Razvedochnaya Geofizika, Issue 17,  
1966, pp 75-81.  
\*ACIC TC-1385

Development of Underwater Research,  
by A. N. Dmitriyev.  
RUSSIAN, Razvitiye Morskikh Podvondn'Kh  
Isslyedovani, Moscow.  
Dept of Navy NIC 2495

Geological Mapping and Regional Studies,  
by Ye. T. Shatalov and A.P. Markovskiy, 14 pp.  
RUSSIAN, collection, Razvitiye Nauk o Zemle  
v SSSR, Moscow, "Nauka" Publishing House,  
1967, pp. 99-112.  
JPRS 44,221

Geology of Coal, by I.I. Gorakiy, 9 pp.  
RUSSIAN, collection, Razvitiye Nauk o Zemle  
v SSSR, Moscow, "Nauka" Publishing House,  
1967, pp. 261-169.  
JPRS 44,221

Crimean Underwater Scuba Project, by Galina  
Guseva, 4 pp.  
RUSSIAN, newspaper, Sovetskaya Rossiya,  
Moscow, 15 Oct 67, p. 4.  
JPRS 44,179

Toxicology of the Rare Metals.  
RUSSIAN, bk, Toksikologiya redkikh metallov,  
1963.  
AEC-TR-6710

Scientific  
Earth Sciences & Oceanography (Contd)

Structure of the Earth's Crust by Geophysical Data, by G. Z. Gurariy, I. A. Solov'yeva. RUSSIAN, per, Trudy Akademii Nauk SSSR, Geologicheskii Institut, Vol 98, 1963, pp 1-129.  
\*ACIC TC-1394

Old Phosphorites of Asia and Their Genesis, by G. I. Bushinskii. RUSSIAN, per, Trudy Akademii Nauk SSSR, Geologicheskii Institut, Vol 149, 1966, 190 pp.  
\*CSFTI TT 68-50375

Geophysical Explorations in the Soviet Arctic and Antarctic Regions. RUSSIAN, bk, Trudy Arkticheskogo i Antarkticheskogo Nauchno-Issledovatel'skogo Instituta Glavnogo Upravleniya Severnogo Morskogo Puti ministerstva Morskogo Flota SSSR, Izd. "Morskoi Transport", Leningrad, 1962, 112 pp.  
\*CSFTI TT 68-50316

Sixth Cruise D/E "OB" 1960-1961, by A. F. Treshnikov. RUSSIAN, bk, Arkticheskii i Antarkticheskii Nauchno-Issledovatel'skii Institut Trudy Sovetskoi Antarkticheskoi Ekspeditsii. Tom. 39. Nauchnye Rezultaty i Materialy Nablyudenii Izd. "Morskoi Transport", Leningrad, 1963, 227 pp.  
\*CSFTI TT 68-50311

Permanent Currents of the Northern Barents Sea, by V.P. Novitskiy, 32 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 64, Leningrad, pp. 1-32.  
Dept of Navy NOO tr 349

Some Data on the Water Exchange Between the Barents and Norwegian Seas, by B.P. Kudlo, 6 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 64, Leningrad, 1961, pp. 33-38.  
Dept of Navy NOO tr 350

Water and Salt Exchange Between Kubanskiye Limany and the Sea of Azov, by V.N. Drozdov, 18 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 83, Godrokhimiya Morya, Leningrad 1965, pp. 272-289.  
Dept of Navy NOO tr 374

Scientific  
Earth Sciences & Oceanography (Contd)

Coastal Currents of the Gulf of Riga, by A.N. Baranov, 7 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965.  
\*Dept of Navy NOO tr 383

Investigation of Relationship Between the Field of Atmospheric Pressure and Currents in the Gulf of Finland, by Yu. D. Mikhaylov and M.A. Babanina, 6 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 68-63.  
\*Dept of Navy NOO tr 384

Tables for the Calculation of Components of Maximum Tide Currents, by V.M. Al'tshuler, and Yu. A. Tropeznikov, 52 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, 1965.  
\*Dept of Navy NOO tr 387

The Problem of Hydrology of Coastal Antarctic Water, by B.A. Filippov, 13 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 64-76.  
\*Dept of Navy NOO tr 385

Calculation of the Actual Tide Fluctuations in Harmonic Analysis, by V.M. Al'tshuler, 9 pp. RUSSIAN, per, Trudy Gosudarstvennogo Okeanograficheskogo Instituta, Vol. 87, Leningrad, 1965, pp. 96-104.  
\*Dept of Navy NOO tr 386

A Study of the Effect of the Forest on Ground Waters, by N. S. Biryukov, 21 pp. RUSSIAN, per, Issledovanie vliyaniya lesa na gruntovye vody. -- Akademiya Nauk SSSR, Trudy Laboratorii Lesovedeniya, Lesnaya Klimatologiya i Gidrologiya, Vol 3, 1961, pp 115-135.  
\*CSFTI TT 68-50409

The Principle of Dividing Absolute (Gravimetric) Deviations of Plumb Line Into Local and General (Planetary) Tilts, by V.V. Buzuk, 5 pp. RUSSIAN, per, Trudy Novosibirskogo Instituta Inzhenernoy Geodesii, Aerofotos'yemki i Kartografi, Vol. XVIII, No. 1, 1964, pp. 9-13.  
Dept of Navy NOO tr 356

Scientific  
Earth Sciences & Oceanography (Contd)

Methods of Oceanographic Investigations.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 39, 1960, 140 pp.  
\*CSFTI TT 68-50356

Methods of Marine Geological Research.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Tom 44, Izdatel'stvo Akademii Nauk SSSR, 1960, 134 pp.  
\*CSFTI TT 68-50357

Oceanographical Investigations Made by the R/V VITYAZ' in the Northern Pacific According to the International Geophysical Year Program.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Vol 45, 1961, 291 pp.  
\*CSFTI TT 68-50358

Dynamics and Morphology of Sea Coasts.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii, Izdatel'stvo Akademii Nauk SSSR, Moskva, Vol 48, 1961, 366 pp.  
\*CSFTI TT 68-50355

The Problems of Dynamic Oceanology.  
RUSSIAN, bk, Akademiya Nauk SSSR, Trudy Instituta Okeanologii Tom 52, Izdatel'stvo Akademii Nauk SSSR, Moskva, 1961, 178 pp.  
\*CSFTI TT 68-50353

Distribution of Net-Sampled Phytoplankton as Effected by Hydrological Conditions in the North Indian Ocean, by V. Zernova and U.A. Ivanov, 8 pp.  
RUSSIAN, journal, Trudy Instituta Okeanologii, Vol LXIV, Moscow 1964, pp. 257-264.  
Dept of Navy NOO tr 331

Echo-Sounding Records of Macroplankton Concentrations and Their Distribution in the Pacific Ocean, by K.V. Beklemishev, 33 pp.  
RUSSIAN, per, Trudy Inst. Okeanologii AN SSSR, Vol. 65, 1964, pp. 197-229.  
Dept of Navy NOO tr 343

Scientific  
Earth Sciences & Oceanography (Contd)

Physical Properties of Sediments in the Pacific Ocean, by S. V. Bruyevich & E. Z. Kulik.  
RUSSIAN, per, Fizicheskiye Svoystva Osadkov Tikhogo Okeana, Khimicheskiye Protessy V Morskikh Vodakh I Osadkakh, Trudy Instituta Okeanologii, Vol 83, 1967, pp 153-168.  
Dept of Navy NOO tr 394

Benthos of Gulfs Zaliv Alasheyeva and Zaliv Leningradskiy, by V. S. Korotkevich.  
RUSSIAN, per, Bentos Zalivov Alesheyeva I Leningradskogo, Trudy Sovetskoy Antarkticheskoy Ekspeditsii, Vol 51, 1967, pp 116-124.  
Dept of Navy NOO tr 395

Biological Studies, by V. S. Korotkevich.  
RUSSIAN, per, Biologicheskiye Raboty, Trudy Sovetskoy Antarkticheskoy Ekspeditsii, Vol 51, 1967, pp 125-140.  
Dept of Navy NOO tr 396

The Problem of Historical Hydrology of Seas and Oceans, by M.M. Yermolayev, 10 pp.  
RUSSIAN, per, Voprosy Geografii Klimatologii i Gidrologiya, Vol 7, pp. 27-36.  
Dept of Navy NOO tr 346

Thermal History of the Earth, by V. I. Baranov, 24 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Znizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 22-38.  
P100030068-V  
FTD-MT-64-233

Chemical Evolution of Early Organic Compounds of Earth, by G. P. Vdovkin, 6 pp.  
RUSSIAN, Col of Art, Vozinknoveniye Znizni vo Vselennoy. Doklady na Soveshchani Komissii po Kosmogonii Astronomicheskogo Soveta AN SSSR, 1963, pp 39-43.  
P100030068-V  
FTD-MT-64-233

Benthic Fauna of the Norwegian Iceland Area as an Indicator of Water Regime, by Z. I. Kobyakova, 6 pp.  
RUSSIAN, journal, Zoologicheskiy Zhurnal, Vol. 39, No. 3, Moscow, 1960, pp. 321-326.  
\*Dept of Navy NOO tr 390

Scientific  
Earth Sciences & Oceanography (Contd)

Pelagic Larvae of Some Polychaeta in the White Sea, by V.A. Sveshnikov, 12 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 39, No. 3, 1960, pp. 343-355.  
\*Dept of Navy NOO tr 389

The Deep Water Plankton of the Sea of Japan, by M. Ye. Vinogradov.  
RUSSIAN, per, O Planktone Glubinykh Vod Yaponskogo Morya. Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 500-508.  
Dept of Navy NOO tr 397

New Fish Families for the Antarctica, Rpt 2. The Family of Pearl-Eyed Fishes, by A. P. Andriyashov.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 563-566.  
Dept of Navy NOO tr 398

European Eel in Kol'skiy zaliv, by K. G. Konstantinov & V. P. Sorokin.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 4, 1960, pp 621-622.  
Dept of Navy NOO tr 399

Benthos Distribution in the Central and Southern Caspian, by N. N. Romanova.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 6, 1960, pp 811-825.  
Dept of Navy NOO tr 400

On the Assumed Suppression of Invertebrates With a Long Life Cycle in the White Sea, by L. A. Kuderskiy.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 6, 1960, pp 826-831.  
Dept of Navy NOO tr 401

Quantitative Distribution of Benthos in the Eastern Bering Sea, by A. A. Neyman.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 9, 1960, pp 1281-1292.  
Dept of Navy NOO tr 402

Some Biological Observations on the White Whale From the Aircraft, by V. M. Bel'Kovich.  
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 39, No 9, 1960, pp 1414-1422.  
Dept of Navy NOO tr 403

Scientific  
Earth Sciences & Oceanography (Contd)

Vertical Zonality of Fish Distribution in the Upper Bathial of the Sea of Okhotsk, by V.P. Shuntov, 12 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 44, No. 11, Moscow 1965, pp. 1678-1689.  
\*Dept of Navy NOO tr 391

Zooplankton Off the West Coast of the South Caspian, by A.G. Kasymov, 5 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 45, No. 2, Moscow 1966, pp. 172-176.  
\*Dept of Navy NOO tr 392

A New Shark Species in the Tonkin Gulf, by L.N. Besednov, 3 pp.  
RUSSIAN, journal, Zoologicheskii Zhurnal, Vol. 45, No. 2, Moscow, 1966, pp. 302-304.  
\*Dept of Navy NOO tr 393

Relationship of Transportation to the Spectral Composition of Irridation, by A. R. Konstantinov & N. I. Goysa, 9 pp.  
UKRAINIAN, per, Trudy Ukraine Hydromet. Inst., No 41, 1964, pp 126-134.  
\*CSFTI TT 68-50435

Problems of Geotectonics in China, by Ch'en Kuo-ta, 183 pp.  
CHINESE, bk, Chung-kuo ta-ti kou-tsao wen-t'i, Nov 1965.  
\*ACIC TC-1382

Characteristics of the Cenozoic and Mesozoic Geological Structure Development and North and South China, by Huang Chen-hui, 105 pp.  
CHINESE, bk, Hua-pei hua-nan chung-sheng-tai hsien-sheng tai ti-chih kuo-tsao ta-chan te-cheng, Jun 1966.  
\*ACIC TC-1383

Analytical Solution of Radial Triangulation with a Stereocomparator, by Hsien lin Liu.  
CHINESE, per, Ta'ei hsiang pao (Acta Geodetica et Cartographica Sinica), Vol 7, No 4, 1964, pp 261-274.  
\*FTD-HT-23-160-68C



Scientific  
Earth Sciences & Oceanography (Contd)

Consideration of the Influence of Near Topographic Masses in Determining Terrain Corrections with Application of Formulas for Numerical Integration, by M. Bursa.  
CZECH, per, Prace Geofysikalniho Ustava Ceskoslovenske Akademie Ved, No 217; Geofysikalni Sbornik, Vol 13, 1965, pp 43-69.  
\*ACIC TC-1396

Study of the Correlation Gravity Anomalies and Elevations in the Territory of the Czechoslovak Republic, by V. Vyskocil, I. Jakubcova.  
CZECH, per, Prace Geofysikalniho Ustava Ceskoslovenske Akademie Ved, No 219; Geofysikalni Sbornik, Vol 13, 1965, pp 87-100.  
\*ACIC TC-1397

Influence of one of the Systematic Errors in the Geographic Latitude Determination on the Form of the Geoid, by Milos Pick.  
CZECH, per, Studia Geoph et Geod, Issue 4, 1960, pp 205-216.  
ACIC TC-1300

Drainage of Bogs and Reclamation of New Land in Finland, by V. N. Gorinskii, 3 pp.  
FINNISH, per, Osushenie bolot i osvoenie novykh zemel'v Finlydii. -- Zemledel'ye, Vol 25, No 5, 1963, pp 77-79.  
\*CSFTI TT 68-50403

Foundations in Absolute Differential Geometry of the Earth's Potential Field, by A. Marussi.  
FRENCH, rpt, Bulletin Geodesique, New Series No 14, 1949, pp 411-439.  
\*ACIC TC-1391

Special Report on Leveling and Gravity, by C. F. Baeschlin.  
FRENCH, rpt, Bulletin Geodesique, New Series no 67, 1960, pp 246-298.  
\*ACIC TC-1386

The Rehabilitation of Classical Geodesy and Three-Dimensional Geodesy, by J. J. Levallois.  
FRENCH, rpt, Bulletin Geodesique, New Series No 68, 1963, pp 193-199.  
\*ACIC TC-1389

Scientific  
Earth Sciences & Oceanography (Contd)

Selected Portions from Book: International Yearbook of Cartography, by Edward Imhof.  
FRENCH and GERMAN, bk, Annuaire International de Cartographie (Internationales Jahrbuch fuer Kartographie), 1966, pp 25-31; 33-39, 41-45; 81-90; 103-111; 114-119; 122-135.  
\*ACSI J-4142  
ID 2204001368

Askania Gravimeters Model GS-11, GS-12, Tide Recorder.  
GERMAN, rpt, Askania Pamphlet No 1442d, 1957, pp 3-11.  
ACIC TC-1352

Performance and Capability of Modern Askania Gravimeters, by R. Schulze.  
GERMAN, rpt, Special Publication 1442h, Reprint from Askania-Warte, No 53, 1958, pp 3-7.  
ACIC TC-1353

Comparison of the Bretschneider Relations Concerning the Distribution of the visually-Observed Waves and the Spectrum of the Sea Waves with the Results of the Evaluation of Wave Records from the Helgolander Bucht (Deutsche Bucht), by Jurgen Piest, 7 pp.  
GERMAN, per, Deutsche Hydrographische Zeitschrift, Vol. 16, No. 2, Hamburg, 1963, pp. 57-63.  
Dept of Navy NOO tr 322

Swell in the Atlantic and on the West Coast of Africa, by Prof. Otto Jessen, Ph.D., 10 pp.  
GERMAN, per, Petermanns Geographische Mitteilungen, Vol. 95, First Quarterly, Gotha, Germany, 1951, pp. 7-16.  
Dept of Navy NOO tr 319

On the Problem of Peeling of Heterogeneous Spheroidal Figures of Equilibrium, by Karl Ledersteger.  
GERMAN, per, Schweizerische Zeitschrift fur Vermessung, Photogrammetrie, und Kulturtechnik, No 6, 1966, pp 1-14.  
ACIC TC-1299

Statistical Investigations of Foehn in the Reuss Valley and Attempt at Objective Foehn Forecasting for the Station at Altdorf, by Richard Widner, 56 pp.  
GERMAN, per, Vierteljahrsschrift der Naturforschenden Gesellschaft in Zurich, 4th Quarter Issue, 31 Dec 1966, pp 331-375.  
\*ACSI J-3348  
ID 2204042067

Scientific  
Earth Sciences & Oceanography (Contd)

Gravity Prediction and Adjustment Computation,  
by H. Moritz.  
GERMAN, per, Zeitschrift für Vermessungswesen,  
Vol 90, No 6, Jun 1965, pp 181-184.  
\*ACIC TC-1392

Genetic Soil Types, Subtypes and Categories of  
Hungary: A Systematic List. Sect 2, "A Genetic  
Manual of Soil Mapping Methods," by Darab Katalin,  
90 1/2 pp.  
HUNGARIAN, per, A Genetikus uzemi talajterkepezes  
modszerekonyve. OMMI Kiadvanyai. Genetikus Talaj-  
terkepek. Foszerkeszto: Gerei Laszlo. Orszagos  
Mesogazdasagi Minosegvizsgalo Intezet. Ser I,  
No 9, 1966, pp 165-254.  
\*CSFTI TT 68-50437

Dynamic Methods for the Geodetic Application of  
Artificial Satellites, by P. Biro.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 4, 1967, pp 241-249.  
\*ACIC TC-1398

Determination of the Relative Position of Two  
Earth Ellipsoids on the Basis of the Triangulation  
Net, by E. Honyi.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 4, 1967, pp 263-268.  
\*ACIC TC-1399

Hungarian-Soviet Relations in Geodesy and  
Cartography, by Istvan Joo, Odon Bereczky, 7 pp.  
HUNGARIAN, per, Geodezia es Kartografia, Vol 19,  
No 6, 1967, pp 401-405.  
JPRS 44106

Hungarian Genetic Soil Map, by Pal Stefanovits  
& Szucs Laszlo, 75 pp.  
HUNGARIAN, per, Magyarorszag genetikus talajterkepe.  
-- OMMI Kiadvanyai. Genetikus Talajterkepek.  
Foszerkeszto: Gerei Laszlo. Orszagos Mesogazdasagi  
Minosegvizsgalo Intezet. Budapest. Ser I, No 1,  
1961, 75 pp.  
\*CSFTI TT 68-50436

The Present State of Knowledge of Carsismo  
and Subterranean Hydrography in Calabria,  
by L. Lacquaniti, 6 pp.  
ITALIAN, per Atti Del XVII Congresso  
Geografico Italiano, 1957, pp 113-123.  
DIA LN 414-67

Scientific  
Earth Sciences & Oceanography (Contd)

Tasks of the Polish Ministry of Shipping in  
1967, by Janusz Burakiewicz.  
POLISH, per, E. Technika i Gospodarka Morska,  
Vol 17, No 1(187), 1967, pp 1-3.  
\*CFSTI TT-67-56124/9

An Experimental Method of Measurements with the  
Gravimeter Askania GS-11 on a Frozen Sea, by  
Tadeusz Chojnicki.  
POLISH, per, Prace Instytutu Geodezji i Karto-  
grafii, Vol 13, Copy 1 (28), 1966, pp 127-141.  
ACIC TC-1333

Expansion of Geological Explorations, by  
Al. Codarcea, 3 pp.  
RUMANIAN, newspaper, Rominia Libera, 30 Dec  
67, p. 3.  
JPRS 44,330

Isomagnetic Charts of Boliva, Reynaldo Salgueiro  
Pabon.  
SPANISH, per, Boletin del Instituto Boliviano del  
Petroleo, Vol 1, No 2, June 1961, pp 27-45.  
ACIC TC-1280

Electronics & Electrical Engineering

Cathode Processes in the Mercury Arc, by  
I. G. Kesayev, 345 pp.  
RUSSIAN, bk, 1964.  
CONSULTANTS BUREAU

Certain Questions of Telemetry of Parameters in  
Systems with Dispersed Objects, by V. I.  
Kurochenko and N. I. Babanin, 21 pp.  
RUSSIAN, bk, AN KIROSSR. Institut Avtomatiki.  
Primeneniye Veskontaktnykh Elementov v Sistemakh  
Avtomaticheskogo Kontrol'ya, 1963, pp 1-17.  
PI00030168  
FTD-MT-65-82

High-Speed Immediate-Access Memory with Associa-  
tive Address Selection Equipped with Tunnel Dio-  
des, by Ya. N. Pavlovskiy, R. S. Dokin.  
RUSSIAN, per, AN LatSSR. Institut Elektroniki i  
Vychislitel'noy Tekhniki. Avtomatika i  
Vychislitel'naya Tekhnika, No 14, 1966, pp 123-  
132.  
\*FTD-MT-24-43-68

Scientific  
Electronics & Electrical Engineering (Contd)

Matrix Computer for Calculating Correlation Functions, by O.V. Ulin and V.K. Petunin, 9 pp.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye. Institut Avtomatiki i Elektrometrii. Avtomaticheskiy Kontrol' i Elektricheskiye Izmereniya, Vol. 2, 1964, pp. 78-83. P100008968  
FTD-MT-23-830-67

Certain Informational Criteria in the Control of Multiple-Connected Systems, by K. D. Zhuk, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 8-17.  
P100028668-V  
FTD-MT-65-551

Control Synthesis of Arithmetical Unit of a Digital Computer, by V. I. Kartashev, 8 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 18-25.  
P100028668-V  
FTD-MT-65-551

On One Method of Synthesis of Automatic Multi-circuit Systems, by K. D. Zhuk, 6 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 26-31.  
P100028668-V  
FTD-MT-65-551

Generator of Functions for the Solution of Integral Equations in Electronic Models, by A. F. Verlan', 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 32-37.  
P100028668-V  
FTD-MT-65-551

On One Particular Law of Optimum Control Regarding High Speed Operation, by A. A. Snegur, A. D. Semenyuk, 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 38-42.  
P100028668-V  
FTD-MT-65-551

Scientific  
Electronics & Electrical Engineering (Contd)

Investigation of Optimum (By High Speed Operation) Systems of the Second Order, by D. V. Karachenets, V. V. Kolesnik, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 43-52.  
P100028668-V  
FTD-MT-65-551

Automation of Complicated Physical Experiments and Industrial Tests with Help of Digital Computers, by V. M. Yegipko, 9 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 53-61.  
P100028668-V  
FTD-MT-65-551

Certain Questions of Exploitation Reliability of Digital Calculating and Controlling Machines, by L. A. Korytnaya, 12 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 62-73.  
P100028668-V  
FTD-MT-65-551

Selection of the Type of Standards for Correlation Reading Automata, by V. K. Yeliseyev, 7 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 80-86.  
P100028668-V  
FTD-MT-65-551

Equipment of the Treatment of Optical Information Using General Purpose Computers, by V. I. Rybak, 5 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 87-91.  
P100028668-V  
FTD-MT-65-551

Question of Automatic Treatment of Sound Information, by V. G. Zaytsev, 11 pp.  
RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 92-102.  
P100028668-V  
FTD-MT-65-551

Scientific  
Electronics & Electrical Engineering (Contd)

Calculation of Photoelectric Systems with Scanning Beam, by V. K. Yeliseyev, 8 pp. RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 103-110. P100028668-V  
FTD-MT-65-551

Investigation of High Speed Optimum Operation of Systems of the Second Order (A Case of Complex Conjugate Roots of a Characteristic Equation of the Linear Part), by D. V. Karachenets, 8 pp. RUSSIAN, Col of Art, AN UKRSSR. Institut Kibernetiki. Kibernetika i Vychislitel'naya Tekhnika, 1964, pp 111-119. P100028668-V  
FTD-MT-65-551

A Method of Minimizing Microprograms, by T.F. Slobodyanyuk, 11 pp. RUSSIAN, per, AN UkrSSR. Kiberneticheskaya Tekhnika, Kiev, 1965, pp. 72-80. P100008668  
FTD-HT-23-600-67

Special-Purpose Analog Computers Assembled from Standard Modules, by V. L. Ugurtsov. RUSSIAN, per, AN UkrSSR. Institut Kibernetiki i Vychislitel'nykh Tsentrov. Voprosy Kibernetiki i Vychislitel'noy Matematiki, No 2, 1966, pp 27-37.  
\*FTD-HT-23-143-68

Comparing the Redundancies Used for Enhancing Reliability of Information Systems, by G. P. Beznosov. RUSSIAN, per, Avtomatich Kontrol' i Metody Elektrich Izmerniy: Tr Konf. t. I: Teoriya Izmerniy Info Sistem, 1966, pp 77-83.  
\*FTD-HT-23-146-68

Optimal Encoding of Telemetry Signals, by V. A. Vittikh. RUSSIAN, per, Avtometriya, No 3, 1965, pp 26-33.  
\*FTD-HT-23-83-68

Adaptive Methods of Analog-to-Digital Conversion, by A. Sovin'skiy, 9 pp. RUSSIAN, per, Avtometriya, No. 4, Novosibirsk, 1967, pp. 90-97.  
JPRS 44,403

Scientific  
Electronics & Electrical Engineering (Contd)

Approximate Calculation of Acoustic Insulation of Lightweight Multilayer Structures Using the M-20 Electronic Computer, by I. V. Volkov, L. Ya. Kudisova. RUSSIAN, bk, Borba s Shumami i Vibratsiyami, 1966, pp 256-258.  
\*FTD-HT-23-102-68

Academician Glushkov Foretells Future of Cybernetics, by V. Glushkov, 7 pp. RUSSIAN, newspaper, Ekonomicheskaya Gazeta, No. 2, Moscow, Jan 68, p. 41.  
JPRS 44,415

Optimum Design of the Salient-Pole Inductor in Machines Synchronous, by A. Avetisyan. RUSSIAN, per, Elektrichestvo, No 6, 1965, pp 45-50.  
\*FTD-HT-23-142-68

Growth of a Long Spark and Lightning, by I. S. Stekol'nikov, A. V. Shkilov. RUSSIAN, per, Energeticheskii Institut. Problemy Elektro-Energetiki, 1966, pp 97-110.  
\*FTD-MT-24-46-68

The Water Conditions in Thermal Electric Stations (Conventional and Atomic), by P. Akol'zin, V. V. Gerasimov, 251 pp. RUSSIAN, bk, Energiya, 1965, Chapters VII, VIII, IX, XI, XIII, XIV and XVI.  
P500032468-V  
Dept of Navy/NIC Trans No 2151

Ejectors into Trailwater in Integral Hydroelectric Plants, by S. M. Slisskii. RUSSIAN, bk, Eshketsiya v nizhnii b'ef na sovmeshchennykh gidroelektrostantsiyakh, - Moskva, Gosudarstvennoe Energeticheskoe Izd-vo, 1953, 156 pp.  
\*CSFTI TT 68-50376

Value of Computers in the Management of Pharmacies, by I.K. Agalakova and N.A. Agalakov, 6 pp. RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 6-10.  
JPRS 44,354

Scientific  
Electronics & Electrical Engineering (Contd)

Punched Card Analysis of Ex Tempore Prescriptions Compounded at Pharmacies, by F.A. Konev and K.F. Kulesh, 7 pp.  
RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 10-13.  
JPRS 44,354

All Hospital Pharmacies Should be Operated on a Cost Accounting Basis, by M.N. Bushkova, et al, 6 pp.  
RUSSIAN, per, Farmatsiya, No. 6, Moscow, Meditsina Publishing House, Nov-Dec 67, pp. 15-18.  
JPRS 44,354

Development of Electrical Energy in USSR.  
RUSSIAN, per, Gosudarstvennyi Proizvodstvennyi Komitet po Energetika i Elektrifikatsii SSSR. Institut Orgenergostroi. Moskva, Izd-vo "Energiya", 1965, 89 pp.  
\*CSFTI TT 68-50383

Limitation of Overvoltage in Tuned Electrical Transmission During Single-Phase Short-Circuit, by O. V. Ollshevskii & G. I. Samorodov, 7 pp.  
RUSSIAN, per, Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR, Seriya Tekhnicheskikh Nauk, Vol 6, No 2, 1964, pp 9-15.  
\*CSFTI TT 68-50382

Concerning Systems that Interact with a Finite Velocity of Signal Propagation, by G. I. Kostychev, 5 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatcionnaya Tekhnika, No 1, 1965, pp 3-6.  
P100029363-V  
FTD-MT-65-72

Computing the Electron Conductivity of the Second Resonator Gap in Klystrons with Large Bunching Parameters, by G. P. Petin & A. Ya. El'Bert.  
RUSSIAN, per, Izvestiya Vysshikh Zavedeniy -- Radiotekhnika, no 3, 1966, pp 387-389.  
\*ACSI J-4348  
ID 2204005468

Electromyographic Research on Speech Sounds, by R.S. Dadshev and Yo. V. Shtil'man, 18 pp.  
RUSSIAN, bk, Kibernetika, Moscow, 1967, pp. 230-252.  
JPRS 44,331

Scientific  
Electronics & Electrical Engineering (Contd)

An Inductive Relaxation Oscillator Based on a Tunnel Diode as a Frequency Converter in an Astatic Voltage Stabilizer, by P. P. Treys.  
RUSSIAN, bk, Leningrad, Institut Elektromekhaniki. Sistemy Upravleniya i Peredachi Informatsii v Elektroenergetike, 1966, pp 184-190.  
\*FTD-MT-24-39-68

Soviet Science Fiction Writers Comment on Future of Cybernetics, 8 pp.  
RUSSIAN, newspaper, Literaturnaya Rossiya, No. 51, Moscow, Dec 67, pp. 18-20.  
JPRS 44,192

A Memory Device Version Based on Cylindrical Magnetic Film, by Ya. A. Khetagurov.  
RUSSIAN, per, Magnitnyye Elementy Vychislitel'noy Tekhniki. Trudy Soveshchaniya, Pt 2, 1966, pp 146-152.  
\*FTD-MT-23-93-68

One Design Variant of a Magnetic Thin-Film Memory with a Planar Substrate, by Ya. A. Khetagurov.  
RUSSIAN, rpt, Magnitnyye Elementy Vychislitel'noy Tekhniki. Trudy Soveshchaniya, Pt. 2, 1966, pp 107-114.  
\*FTD-MT-23-93-68

Models of Real Media and Seismic Wave Fields.  
RUSSIAN, bk, Modeli Real'nykh Sred i Seismicheskie Volnovye Polya, 1967.  
Plenum Press

Device for Reading and Printing Alphabet Digital Information from Perforation Cards [USP-1] by Ya. P. Shturman, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskaya Informatsiya, No 1, 1965, pp 29-31.  
P100029568  
FTD-MT-66-582

Principles of Information Theory Illustrated, by V. Siferov, 4 pp.  
RUSSIAN, per, Nedelya, No 46, 5-11 Nov 1967, p 10.  
JPRS 44071

Fuel Cells. Their Electrochemical Kinetics. 121 pp.  
RUSSIAN, rpt, Papers Presented at the Second Conference on Fuel Cells, Moscow. 1966.  
CONSULTANTS BUREAU

Scientific  
Electronics & Electrical Engineering (Contd)

Plasma and Electron Amplifiers and Superhigh Frequency Oscillators, by G. A. Bernashevskiy, Ye. V. Bogdanov.  
RUSSIAN, bk, Plazmennyye i Elektronnyye Usiliteli i Generatory Svch., 1965, 96 pp.  
\*FTD-MT-24-30-68

Semiconductor Compounds; Their Production and Properties. Chalcogenides of Group II, IV, and V Elements, by N. Kh. Abrikosov.  
RUSSIAN, bk, Poluprovodnikovye Soedineniya, Ikh Polucheniya i Svoystva. Khal'kogenidy Elementov II, IV, i Grupp Periodicheskoi Sistemy, 1967, PLENUM Press

Transmission of Information from a Measurement-Recording Center to a Computer Through a Communication Line, by Yu. V. Gavrilov.  
RUSSIAN, per, Fribery i Tekh. Eksper., No 4, 1967, pp 92-98.  
\*Dept of Navy/APL/JHU J-1133

Miniature Semiconductor Transducer for Measuring Pressure and Temperature, by V. M. Akhutin & L. A. Osipovich.  
RUSSIAN, per, Fribery i Sistemy Upravleniya, Vol 7, 1967, pp 50-51.  
\*Dept of Navy/APL/JHU J-1124

Problems of Synthesis of Digital Automata, by V. G. Lazarev, A. D. Zakrevskiy.  
RUSSIAN, bk, Problemy Sinteza Tsifrovyykh Avtomata, 1967.  
Plenum Press

Programming, by N. A. Krinitskiy.  
RUSSIAN, bk, Programirovaniye, 2 Ed. 1966, 599 pp.  
\*FTD-HT-23-139-68C

Computer Center of Latvian State University Described, by Il'ya Lyumkis, 7 pp.  
RUSSIAN, newspaper, Sovetskaya Latvija, Riga, 12 Nov 67, p. 2.  
JPRS 44,292

Microminiature Aeronautical Digital Computers, by V. M. Dollkart, G. K. Novik.  
RUSSIAN, bk, Sovetskoye Radio, 1967, 248 pp.  
\*FTD-MT-24-27-68

Scientific  
Electronics & Electrical Engineering (Contd)

Input and Output Devices for Electronic Computers, by A.M. Bondarev, 3 pp.  
RUSSIAN, per, Standartizatsiya, No. 3, 1964, pp. 44-45. P100008268  
FTD-HT-23-842-67

Theory of Automatic Control Systems, by V. A. Besekerskiy and Ye P. Popov, 903 pp.  
RUSSIAN, bk, Teoriya Sistem Avtomaticheskogo Regulirovaniya, 1966, 992 pp.  
ACSI J-3765  
ID 2204054967

Thermal Stability of Transistors and Reliability of Radio Equipment, by Yu. A. Shifrin-Dryzhalovskiy, 228 pp.  
RUSSIAN, bk, Teplovaya Ustoychivost' Transistorov i Nadezhnost' Radioelektronnoy Apparatury, 1966.  
ACSI J-3509  
ID 2204048267

Correcting Arithmetic Codes in a Residual Class System, by S. B. Fayn.  
RUSSIAN, per, Trudy AN GruzSSR. Vychislitel'nyy Tsentr. Voprosy Vychislitel'noy Tekhniki, Vol 7, No 2, 1966, pp 60-91.  
\*FTD-HT-23-151-68C

Dependence of Coefficient of Friction on the Difference of Potentials of Rubbing Metals, by A. A. Dychko, 7 pp.  
RUSSIAN, per, Trudy Omskogo Instituta Inzhenerov Zheleznodorozhnogo Transporta, Vol 43, 1963, pp 117-125.  
P100014468  
FTD-MT-66-38

Transmission of Alternating Electrical Current at Distances of 1500-3000km, by V. K. Shcherbakov.  
RUSSIAN, per, Trudy Sibirskogo Nauchno-Issledovatel'skogo Instituta Energetiki, Novosibirsk, Redaktsionno-Izdatel'skii Otdel Sibirskogo Otdeleniya AN SSSR, Vol 1, No 20, 1964, 174 pp.  
\*CSFTI TT 68-50379

Transmission of Electrical Energy at Distances of 1500-3000km, by V. K. Shcherbakov.  
RUSSIAN, per, Trudy Transportno-Energeticheskogo Instituta, Novosibirsk, Izd-vo Sibirskogo Otdeleniya AN SSSR, Vol 16, 1963, 141 pp.  
\*CSFTI TT 68-50378

Scientific  
Electronics & Electrical Engineering (Contd)

Certain Electrical Properties of Thin Films  
of the GaTe System, by V. I. Gramatskiy  
and V. P. Mushinskiy, 6 pp.  
RUSSIAN, per, Kishinev. Universitet.  
Uchenyye Zapiski, Vol 69, 1964, pp 38-40.  
P100019968  
FTD-HT-23-634-67

Radio Electronic Complexes Aboard Submarines,  
by V. F. Droblenkov & V. N. Gerasimov.  
RUSSIAN, bk, Ugroza iz Glubini, 1966, pp 67-80.  
Dept of Navy NTC tr 2532

Unified Complex of Ferrite-Transistor Elements  
for 200 kHz Cycling Rates, by B. A. Yefimov,  
G. N. Chizhukhin.  
RUSSIAN, per, Vesoyuznoye Soveshchaniye po  
Magnitnym Elementam Avtomatiki i Vychislitel'noy  
Tekhniki, 10th, Kaunas, 1964. Magnitnyye Elementy  
Vychislitel'noy Tekhniki; Trudy Soveshchaniya.  
Pt 2 Moscow, Izd-vo Nauka, 1966, pp 49-56.  
\*FTD-HT-24-41-68

Foreword, by G.A. Zlobin, 5 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

About the Identification of Images of Spatial  
Objects, by L.A. Rastrigin, 7 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

All-Union Conference on Problems Pertaining to  
the Use of Cybernetics in Law, 7 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

Cybernetic Simulation in the Study of Hand-  
writing, by R.M. Lantaman, 8 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Certain Questions Concerning the Theory of  
Identification of Objects with the Use of the  
Apparatus of Projective Geometry, by V.  
Yurans, 11 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

Prospects Involved in the Utilization of  
Cybernetic Achievements in the Operation of  
Legal Establishments, by A.R. Shlyakhov, 15 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

The Utilization of Cybernetic Machines and  
Punchcard Computers in Concrete Sociological  
Study of the Causes of Crime and the Person-  
ality of the Criminal, by V.Ye. Chugunov,  
et al., 15 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

About the Question of Formalizing a Branch of  
the Law, by V.M. Kogan, 17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

On the Utilization of Mathematical Methods in  
Expert Handwriting Analysis, by V.P. Vlasov,  
17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

Questions Concerning an Improvement in  
Criminal Record Keeping, by V.V. Pankratov,  
17 pp.  
RUSSIAN, bk, Voprosy Kibernetiki i Pravo,  
"Nauka" Publishing House, Moscow, 1967,  
376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Handling of Legal Evidence in the Light of Cybernetic Ideas, 18 pp., A. I. Trusov. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About the Programming of the Process Involving the Application of Legal Standards by V.N. Kudryavtsev, 20 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Certain Questions Concerning Evaluation as a Quantitative Characteristic of the Reliability of Proof, by A.A. Eysman, 20 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Cybernetics and the Resolution of Certain Legal Tasks, by A.F. Deyev, et al, 22 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Mathematical Methods of Investigation in Criminology, by Z. I. Kirsanov, 24 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Questions Pertaining to Investigative Reasoning in the Light of Information Theory, by A.R. Ratinov, 24 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

About a Reference-Information Service in the Field of Law, by D.A. Karimov, 26 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Scientific  
Electronics & Electrical Engineering (Contd)

Utilization of the Apparatus of Projective Geometry in the Process of the Identification of Individuals by Their Photographs, by R.E. El'bur, 27 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Cybernetics and Certain Questions Pertaining to Legal Graphology, by L.G. Edzhubov, 30 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

A Study of Law Using Methods of Mathematical Logic, by O.A. Gavrilov, 32 pp. RUSSIAN, bk, Voprosy Kibernetiki i Pravo, "Nauka" Publishing House, Moscow, 1967, 376 pp.  
JPRS 43,954

Algorithm and Control System for Open-Hearth Furnaces, by M.I. Korobko and G.F. Martynyuk, 17 pp. RUSSIAN, per, Moscow. Vychislitel'nyy Diya Avtomatizatsiya. Proizvodstva, 1964, pp. 107-117. P100008768  
FTD-HT-23-895-67

Method for Calculating Supersonic Flow Past Blunt Bodies with a Detached Shock Wave, by S. M. Gilevskiy. RUSSIAN, per, Vychislitel'nyy Metody i Programirovaniye, No 6, 1967, pp 173-205.  
\*FTD-MT-24-33-68

Growing Semiconductors From Solutions, by T. G. Petrov, E. B. Treivus, et al. RUSSIAN, bk, Vyrashchivanie Kristallov iz Rastvorov, 1967.  
PLENUM PRESS

Analog Computer for Performing Conformal Transformations, by A.N. Suprun, 3 pp. RUSSIAN, patent, Patent No. 155626 (Appl. No. 792187/26-24, August 25, 1962), 2 pp. P100006368  
FTD-HT-23-832-67



Scientific  
Electronics & Electrical Engineering (Contd)

Antenna Array, by A.F. Yakovlev, 4 pp.  
RUSSIAN, patent, Patent No. 166750 (Appl No.  
875715/26-9, Jan 13, 1964, 2 pp. P100007868  
FTD-HT-66-664

A Three-Component Piezoelectric Accelerometer, by  
V. I. Stepanov.  
RUSSIAN, Patent No 188767, Class 42.  
\*FTD-HT-23-137-68F

Dispersive Type Delay Lines as a Solution to  
Linear FM Pulse Compression, by Tuong Shih-Chia  
and Fong Ming-Yu, 16 pp.  
CHINESE, per, Acta Electronica Sinica, No 4,  
Dec 1965, pp 379-387.  
ACSI J-3806  
ID 2204056167

A New Method for Capacitance Measurement,  
by Chiu Shin Min and Wu Jen Chi, 9 pp.  
CHINESE, per, Tien Tzu Chi Shu, No 11,  
1965, pp 19-20 & 23.  
P100015068  
FTD-HT-66-635

Electrical Engineering Faculty of Czech Advanced  
School of Technology in Prague, by Josef Eichler,  
4 pp.  
CZECH, per, Ceskoslovenske Speje, Vol 12, No 6,  
Dec 67, pp 20-21.  
JPRS 44,227

Computation of Gas Turbine Cycles by Means of  
Computers, by B. Kurs.  
CZECH, per, Strojitrenstvi, Vol 16, No 1, 1966,  
pp 7-8.  
\*FTD-HT-23-752-67

Reliability of Components and Systems, by F.  
Zelany.  
CZECH, per, Strojitrenstvi, Vol 16, No 12, Dec  
1966, pp 883-890.  
\*ACSI J-4277  
ID 2204003268

The Measurement of Post Impact Delay and Tra-  
jectory Duration Using Electromagnetic Phenomena  
Produced by Detonations, by H. J. DeBruine.  
FRENCH/GERMAN, Commissie Proefneming - Handleiding  
Deel XA Hoofdstuk, 22-1a RvF 193/67.11, pp 61-  
109.  
\*ACSI J-4437  
ID 2204008568

Scientific  
Electronics & Electrical Engineering (Contd)

Contact-Free Distance Measurement by Means of  
a Static Test Signal, by W. T. Muller and  
F. H. Lange, 14 pp.  
GERMAN, per, Messen, Steuern, Regeln, No 12,  
1964, pp 403-407.  
P100013768  
FTD-HT-23-640-67

On the Possibilities of Coupling the ZRA 1 Digital  
Computer with Analog Systems, by P. Hufeld.  
GERMAN, per, Messen, Steuern, Regeln, No 12, 1966,  
pp 427-430.  
\*FTD-MT-23-96-68

Determination of the Dielectric Constant  
and the Loss Factor of Foam-Base  
Dielectrics, by L. Grassler, 10 pp.  
GERMAN, per, Nachrichtentechnik, No 2,  
1965, pp 71-74. P100016168  
FTD-HT-66-591

On the Direct Current and Low Frequency Behavior  
of the MOS Transistor, by R. Paul.  
GERMAN, per, Nachrichtentechnik, No 3, 1967,  
pp 87-92.  
\*FTD-HT-23-157-68

Investigation of the Firing of Spark Gaps in the  
Marx Generator Circuit, by Arnold Rodewald.  
GERMAN, rpt, Untersuchungen Uber die Zundung der  
Schaltfunkenstrecken in der Marxschen Vervielfachungsschaltung, 1966.  
\*Dept of Navy NIC

Correlation of Digital Signals With Respect to  
Switching Circuit Analysis and Synthesis, by  
J. Bankowski.  
POLISH, per, Archiwum Automatyki i Telemechaniki,  
Vol 12, No 1, 1967, pp 61-76.  
\*FTD-HT-23-149-68C

Correction of a Contradiction Between the  
Electrodynamic Theory and the Theory of Relativity  
of Electromagnetic Masses, by Enrico Fermi.  
SPANISH, per, Nuovo Cimento, No 25, 1923, pp 159-  
170.  
Dept of Navy NIC tr 2531

Scientific  
Energy Conversion (Non-Propulsive)

New Design Standards for Power Stations and Heating Systems, 6 pp..  
RUSSIAN, journal, Energetik, No. 12, Moscow, Dec 67, pp. 34-35.  
JPRS 44,377

Leningrad Metal Plant Participates in Electrification of Soviet Union, by P.S. Chernyshev, 17 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct. 67, pp. 6-11.  
JPRS 44,265

Development of Boiler-Furnace Design at the Barnaul Boiler Plant, by V.D. Zorichev, and N.V. Popov, 10 pp.  
RUSSIAN, monthly, Leningrad, Energomashinostroyeniye, No. 10, Oct 67, pp. 11-14.  
JPRS 44,265

Gas Turbine Building at Nevskiy Machine Building Plant Imeni Lenin, by Prof. L. A. Kuznetsov, 14 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 15-19.  
JPRS 44,265

Certain Problems in Hydraulic Turbine Building, by Prof. G.S. Shchegolev, 10 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 19-21.  
JPRS 44,265

Turbine Building Development at the Turbomotorny Plant, by D.P. Buzin, 17 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 22-27.  
JPRS 44,265

First Soviet Steam-Gas Installation With Gas Discharge into Boiler, by D.V. Litvinov et al, 7 pp.  
RUSSIAN, monthly, Energomashinostroyeniye, Leningrad, No. 10, Oct 67, pp. 34-36.  
JPRS 44,265

Scientific  
Energy Conversion (Non-Propulsive) (Contd)

Investigation and Calculation of Axial-Turbine Stages, by M. Ye. Deych, B. M. Troyanovskiy, 587 pp.  
RUSSIAN, bk, Issledovaniya i Raschety Stupeney Osevykh Turbin, 1964, pp 1-627.  
P100030368-V  
FTD-MT-65-409

Strength of Turbine Disks, by V. P. Rabinovich. RUSSIAN, bk, Mashinostroyeniye, 1966, 149 pp.  
\*FTD-MT-23-78-68C

Electric Power Development in Egypt, 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 2.  
JPRS 44,183

The Electricity of the High Dam is Now a Reality, ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 3.  
JPRS 44,183

Development of Electric Power Consumption in our Country in the Past 75 Years, 7 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 4.  
JPRS 44,183

The Significance of the Success of Arab Technology in Completing the Electrical Projects of the High Dam Before Their Target Date, 5 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 30 Dec 67, p. 5.  
JPRS 44,183

Medium Voltage Switching Facility Construction in Power Supply Enterprises, by Walter Dressel, Helmut Briest, 11 pp.  
GERMAN, per, Energietechnik, Vol 17, No 11, Nov 1967, pp 510-513, 515.  
JPRS 44060

Scientific  
Materials

Electron Diffraction Analysis of Clay Mineral Structures, by Boris B. Zvyagin. 364 pp.  
RUSSIAN, bk, Mar 1967  
Plenum Press

Handbook of X-Ray Structure Analysis of Polycrystalline Materials, by Lev Mirkin. 731 pp.  
RUSSIAN, bk, 1964.  
Consultants Bureau

High-Temperature Nonmetallic Thermocouples and Sheaths, by Grigoriy Valentinovich Samsonov.  
RUSSIAN, bk, Feb. 1967, 145 pp.  
Consultants Bureau

Metacolloids in Endogenic Deposits, by Lev M. Lebedev. 296 pp.  
RUSSIAN, bk, Sep 1967.  
Plenum Press

Principles of Lithogenesis. Vol 1, by N. M. Strakhov. 245 pp.  
RUSSIAN, bk.  
Consultants Bureau

Principles of Lithogenesis. Vol 2, by N. M. Strakhov. 550 pp.  
RUSSIAN, bk,  
Consultants Bureau

Principles of Lithogenesis. Vol 3, by N. M. Strakhov. 500 pp  
RUSSIAN, bk,  
Consultants Bureau

Ultraviolet Spectra of Elastomers and Rubber Chemicals, by V. S. Fikhtengol'ts, R. V. Zolotareva, et al. 170 pp.  
RUSSIAN, bk, 1966.  
Plenum Press Data Division

Science of Aviation Material, by A. E. Leykin, E. S. Porotskiy, 362 pp.  
RUSSIAN, bk, Aviatsionnye Materialovedeniye. 1964, pp 1-459. P100035868-V  
FTD-MT-65-270

Changes in the External Shape of the Cementite and in the Mechanical Properties During Strain Ageing of Spring Steels, by N. A. Kotkis.  
RUSSIAN, per, Avtom. prom., Vol 32, June 1966, pp 39-41.  
\*BISI 6210

Hard-Alloy-Tipped, Assembled Sector Circular Saws, by V. A. Trusov & L. P. Trusova.  
RUSSIAN, per, Dereboobrabatyvayushchaya Promyshlennost, Moskva, Vol 12, No 7, 1963, pp 25-26.  
\*CSFTI TT 68-50375/1

Scientific  
Materials (Contd)

On the Nature of the Deformation of Frame-Saw Blades Where They are Rolled, by V. F. Fonkin.  
RUSSIAN, per, Dereboobrabatyvayushchaya Promyshlennost, Moskva, Vol 12, No 8, 1963, pp 27-28.  
\*CSFTI TT 68-50375/2

The Effect of Cold Swaging on Hardness of the Tips of Saw Teeth, by V. F. Fonkin & M. M. Balabanov.  
RUSSIAN, per, Dereboobrabatyvayushchaya Promyshlennost, Moskva, Vol 13, No 9, 1964, p 13.  
\*CSFTI TT 68-50375/4

Cutting Forces on a Deep-Cutting Frame Saw, by S. M. Khasdan & V. A. Kononov.  
RUSSIAN, per, Dereboobrabatyvayushchaya Promyshlennost, Moskva, Vol 13, No 12, 1964, pp 14-15.  
\*CSFTI TT 68-50375/5

Winter-Hardiness of Juglans Regia and Other Species of Walnut, by A. M. Ozol, 4 pp.  
RUSSIAN, per, Zimostoykost' gretskogo orekha i drugikh orekhov, -- Doklady Akademii Nauk SSSR, Moskva, Vol 66, No 4, 1949, pp 725-728.  
\*CSFTI TT 68-50425

Soviet Nonferrous Metals, by P. Lomako, 9 pp.  
RUSSIAN, weekly, Ekonomicheskaya Gazeta, Moscow, No. 2, Jan 68, pp. 5-6.  
JPRS 44,171

Physical Investigations of Reactor Shielding, by Yu. A. Kazanskii.  
RUSSIAN, bk, Fizicheskie Issledovaniya zashchity reaktorov, Atomizdat, Moskva, 1966, 384 pp.  
\*CSFTI TT 68-50324

Effect of Magnetic Flocculation on Magnetic Separation, by L. A. Lomovtsev & L. S. Shugol.  
RUSSIAN, per, Gorn. Zhur., Vol 143, No 8, 1967, pp 56-58.  
\*BISI 6259

Investigation of Fluxed Sinter Using a Microprobe, by Z. Nekasov.  
RUSSIAN, per, Izv AN SSSR Met., No 5, 1967, pp 125-132.  
\*BISI 6157

Scientific  
Materials (Contd)

Some Results of An Experimental Investigation of a "Dovetail" Joint, by V. B. Gorlov, 4 pp. RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 120-123. P100029363-V FTD-MT-65-72

Nature of Brown Fumes Formed During the Blowing of Oxygen Through Metal, by M. F. K. Mikkau. RUSSIAN, per, Izv. VUZ Chern. Met., Vol 11, 1963, pp 37-41. BISI 5842

Some Basic Features of the Process of Rolling of Large Ingots, by V. P. Kotelnikov, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No 4, 1967, pp 72-78. BISI 5777

Mechanism of Inoculation of Steel With Zirconium, by V.S. Kovalenko, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 4, 1967, pp. 93-99. \*HB 7334

The Influence of the Solidification Conditions on the Segregation of Sulphur in an Ingot of Steel Containing Rare Earth Elements, by E. Yu. Kolpishon. RUSSIAN, per, Izv VUZ Chern Met., No 7, 1967, pp 46-50. \*BISI 6164

Effect of Grain Size of Iron Ores and Concentrates on the Productivity of a Sinter Plant, by B.M. Nosovitskii. RUSSIAN, per, Izv. VUZ Chern.Met., Vol. 8, 1967, pp. 31-33. \*BISI 6117

Friction in the High-Speed Cold Rolling of Metals Using Various Industrial Lubricants, by D. I. Starchenko. RUSSIAN, per, Izvest. VUZ- Chern. Met., Vol 10, No 8, 1967, pp 86-91. HB 7272

The Use of Glass-Based Suspension Coatings for the Protection of Metals from Oxidation During Heating, by Yu. N. Grdina. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 8, 1967, pp 105-106. HB 7276

Scientific  
Materials (Contd)

Corrosion Resistance to Composite Coatings, by Yu. V. Grdina and A. F. Sofroshenkov. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 8, 1967, pp 113-116. HB 7277

Selection of the Most Representative Information Characterizing the Blast-Furnace Process, by V. Yu. Kaganov. RUSSIAN, per, Izvest VUZ Chern Met., Vol 10, No 9, 1967, pp 12-16. HB 7303

Increase of Wear Resistance of Rolls for Cold Rolling by Peening the Rolls, by M. Ya. Belkin. RUSSIAN, per, Izvest. VUZ Chern. Met., Vol 10, No 9, 1967, pp 120-123. \*BISI 6232

Influence of Nitrogen, Vanadium, and Aluminum on the Mechanical Properties of Heat Treatable Chromium Steel, by M. I. Gol'dshtein and L. M. Panfilova. RUSSIAN, per, Izvest VUZ- Chern Met., Vol 10, No 9, 1967, pp 137-142. HB 7306

Aging Tendency of Steel Under Pressure While Solidifying, by V. B. Livshits and P. N. Bidulya. RUSSIAN, per, Izvest VUZ Chern Met., No 9, 1967, pp 152-154. HB 7305

On the Mechanism of Hardening of Fluxed Pellets - Communication I., by Yu.S.Yusfin, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 25-27. \*HB 7345

Some Features of the Reduction of (Iron-Ore) Pellets, by V.N. Milyutin, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 28-34. \*HB 7346

Mass Spectrometric Analysis of Gases Evolving During the Heating of (Ferrous) Metals in Vacuum, by V.I. Yavovskii, et al. RUSSIAN, per, Izv. VUZ Chern. Met., No. 11, 1967, pp. 39-45. \*HB 7344

Scientific  
Materials (Contd)

Relationships Governing the Fluctuations in Smelting Rate in Blast Furnaces of Various Volumes, by A. I. Bondarenko & M. Ya. Ostroukhov. RUSSIAN, per, Izv. VUZ Chern. Met., Vol 12, 1967, pp 19-23.  
\*HB 7384

High-Temperature Oxidation of Metal Aluminized by the Circulation (Gas) Process, by S. N. Fedoseeva. RUSSIAN, per, Izvest VUZ Cher. Met., Vol 11, No 1, 1968, pp 147-151.  
\*HB 7383

Calculating the Load-Carrying Capacity of Fluid-Film Bearings for Rolling Mills, by A. A. Korolev. RUSSIAN, per, Izv. VUZ Mashin., Vol 2, 1966, pp 133-138.  
BISI 5620

Temperature Regime of Stamping Tools in Liquid Stamping, by N.T. Deordiyev, A. F. Astashov, et al., 10 pp. RUSSIAN, per, Kuzhechno-Shtampovochnoye Proizvodstvo, No. 9, 1965, pp. 11-13.  
P100007368  
FTD-HT-67-232

On the Most Suitable Distance Between Spur Roads for Timber Extraction, by M. M. Korunov, 4 pp. RUSSIAN, per, O naivygodneishem rasstoyanii mezhdru lesovoznyymi usami. -- Lesnaya Promyshlennost', Vol 36, No 9, 1958, pp 12-15.  
\*CSFTI TT 68-50408

Solid Lubricants With Molybdenum Disulfide and the Reduction of Instrument Wear, by Ye.M. Oparina, L.N. Sentyurikhina, et al, 7 pp. RUSSIAN, per, Mashinostroitel', No. 1, 1966, pp. 30-31. P100007968  
FTD-HT-23-920-67

Static and Dynamic Properties of Fiber Glass Plastics, by V. Zvornarzh and I. Tamkhina. RUSSIAN, per, Mekhanika Polimerov, No 3, 1965, pages 87-92.  
Dept of Navy NIC 2513

Scientific  
Materials (Contd)

Influence of Ultrasonics on the Kinetics of Transformation of Undercooled Austenite in Certain Steels, by I. Sh. Tsintsadze and F. N. Tavazze. RUSSIAN, per, Metallor Term Obr Metallor, No 7, 1967, pp 47-50.  
HB 7282

Hydrogen Brittleness of Nonferrous Metals, by B. A. Kolachev. RUSSIAN, bk, Metallurgiya, 1966, 256 pp.  
\*FTD-HT-23-95-68C

Use of Ball Bearing Steel for Cold Rolling Rolls, by V. I. Storozhev. RUSSIAN, per, Metallurg, Vol 12, No 10, 1967, pp 36.  
HB 7301

The Effect of Crystallographic Orientation on the Geometry of a Fused P-N Junction in Gallium Arsenide, by O.I. Pavlova and R.L. Petrusevich, 4 pp. RUSSIAN, per, Moscow, Gosudarstvennyy Nauchno-Issledovatel'skiy i Proyektnyy Institut Obra-botki Isvetnykh Metallov. Sbornik Nauchnykh Trudov, No. 24, 1965, pp. 54-56. P100007268  
FTD-HT-23-553-67

Investigation of the Elastic Properties of Fiberglasses by the Pulsed Ultrasonic Method, by A. I. Potapov. RUSSIAN, per, Novyye Materialy v Tekhnika i Nauke Proshloye Nastoyashcheye, 1966, pp 152-169.  
\*FTD-MT-24-47-68

New Cermet Antifriction Materials for Rubbing Parts, by I. V. Vasil'yev, 10 pp. RUSSIAN, per, Novyye Metallokeramicheskiye Antifriktsionnyye Materialy Dlya Uzlov Treniya, 1965, pp 188-194.  
P100014968  
FTD-HT-67-251

Agglomeration of Pyrite Cinder Concentrate Without Roasting, by L. Ye. Kunin. RUSSIAN, per, Obogashchenie Rud., Vol 1, 1967, pp 19-21.  
\*BISI 6246

Scientific  
Materials (Contd)

Service Performance of Controlled-Feed Inserts of Zircon and Alumina-Silicon Carbide on Continuous Steel Casting Machines, by N. M. Frolovskii.

RUSSIAN, per, Ogneupory, Vol 32, No 12, 1967, pp 23-22.  
HB 7351

On the Compatibility of Glasses in Optic Fibers, by I. Galand & I. V. Koricheva, 7 pp.

RUSSIAN, per, Optiko Mekhanicheskaya Promyshlennost, No 11, 1966, pp 30-34.

ACSI J-3939  
ID 2204059567

The Use of the Photosensitive Coating Method for Studying Plastic Deformation Processes in Metals, by V. K. Vorontsov.

RUSSIAN, bk, Polyarisatsionno-Opticheskiy Metod Issledovaniya Napryazheniy, 1966, pp 223-234.

\*FTD-HT-23-94-68

New Metallurgical Processes Based on Advanced Technology, by Ye. Unkov, 4 pp.

RUSSIAN, per, Pravda, 24 Nov 1967, p 2.  
JPRS 44090

Stability of Materials Subjected to High Temperatures by G. S. Pisarenko.

RUSSIAN, bk, Prochnost' materialov pri vysokikh temperaturakh, Kiev, Izdatel'stvo "Naukova Dumka", 1966, 786 pp.

\*CSFTI TT 68-50308

Development of a Physico-Chemical Theory of Heat Resistance Applicable to Refractory Metals and Alloys, by I. I. Kornilov.

RUSSIAN, bk, Svoystva i Primeneniye Zharoprochnykh Splavov, 1966, pp 3-15.

\*FTD-HT-23-110-68C

Protection of Cellulosic Materials Against Destruction by Microorganisms, by L. I. Kirikina and P. S. Simigin.

RUSSIAN, per, Tekstilnaya Promyshlennost, No 7, 1961, pp 58-62.

\*ACSI J-4245  
ID 2204002668

Investigation of Electrical Characteristics of Some Heat-Resistant Synthetic Films Used in Making Capacitors, by E. M. Kostenko.

RUSSIAN, per, Trudy Leningrad. Politekhicheskii Institut, No 276, 1967, pp 21-23.

\*FTD-HT-23-153-68

Scientific  
Materials (Contd)

Technical Progress in Ingot Casting of Light Alloys, by V. I. Dobatkin.

RUSSIAN, per, Tsvetnyye Metally, No 10, 1967, pp 47-51.

\*FTD-HT-23-144-68

A Welded Steel Casting Ladle, by P. M. Kichaev.

RUSSIAN, per, Vestnik Mashin., Vol 38, No 8, 1958, pp 56-57.

\*BISI 6207

Classification of the Nomenclature for Ferrous Metal Rolled Stock Needs Updating, by

V. Svets, 5 pp.

RUSSIAN, per, Vestnik Statistiki, Moscow, Number 12, Dec 67, pp. 58-59.

JPRS 44,335

On the Question of Condensation of Ferrocene With Ketones, by T. A. Sokolinskaya and T. P. Vishnyakova.

RUSSIAN, per, Visokomolekularniye Soyedineniya, Vol A9, No 3, 1967, pages 677-683.

Dept of Navy NHC 2505

Internal Stresses in Wood During its Drying, by B. N. Ugolev.

RUSSIAN, bk, Vnytnenfic naptiazhenila v drevesine pri ee syshko. -- Moskva, Goslesbumizdat, 1959, 116 pp.

\*CSFTI TT 68-50365

Effect of Silicon Additions on the Corrosion Behaviour of High-Alloy Austenitic Steels in Sulfuric Acid Solutions, by L. F. Tavadse.

RUSSIAN, per, Zashchita Metallov, Vol 3, No 5, 1967, pp 610-613.

HB 7319

Effect of Protective Coatings on High-Alloy Cast Steel EI 572L at High Temperatures, by E. A. Antonova.

RUSSIAN, per, Zashchita Metallov, Vol 3, No 5, 1967, pp 621-624.

HB 7318

Residual Stresses in Cold Drawn Tube and Bar Stock Determined Mechanically as Against By X-Ray Diffraction, by F. Bollenrath.

RUSSIAN, per, Z. Metallk., Vol 55, No 11, 1964, pp 655-659.

\*HB 7366

Scientific  
Materials (Contd)

Oxide Coating on Wire, by A. V. Gorduchuk.  
RUSSIAN, Patent No 184098.  
\*FTD-HT-23-137-68D

Laboratory Determination of Finish Rolling and  
Coiling Conditions During the Hot-Rolling of  
Strip in Continuous Mills, by M. Endrle.  
CZECH, per, Hutn. Listy, Vol 21, No 9, 1966, pp  
616-620.  
BISI 5539

Effect of Different Ratios of Longitudinal/  
Transverse Deformation on the Mechanical Properties  
of Thick Plates, by M. Endrle.  
CZECH, per, Hutn. Listy, Vol 22, Aug 1967,  
pp 546-553.  
BISI 6040

Heating Cold Ingots, by Z. Volf.  
CZECH, per, Hutnik, Vol 9, No 7, 1959, pp 234-  
238.  
\*BISI 6149

Causes of Fractures of and Damage to Smooth  
Work Rolls During Hot and Cold Rolling,  
by M. Musial.  
CZECH, per, Hutnik, Vol. 26, No. 1, 1959,  
pp.22-30.  
\*BISI 6109

Spalling of Rolls Due to Fatigue, by S. Pytko.  
CZECH, per, Hutnik, Vol. 29, No. 5, 1962,  
pp. 180-183.  
\*BISI 6110

On the Life of Metal Moulds, by J. Kadlec.  
CZECH, per, Slevarenstvi, Vol 10, No 1, 1962,  
pp 8-11.  
BISI 5563

The Problems of Increasing the Toughness of Cast  
Tools made from 9% Tungsten High-Speed Steel,  
by O. Kastanek.  
CZECH, per, Slevarenstvi, Vol 14, No 3, 1966,  
pp 95-99.  
BISI 5645

Scientific  
Materials (Contd)

Testing of Water Proof and Water Repellent Tex-  
tiles, by J. Strecky.  
CZECH, per, Textil, No 2, 1966, pp 74-75.  
\*ACSI J-4410  
ID 2204007368

Study Concerning the Effect of Petrographic  
Composition of Bituminous Coal on its Coking  
Qualities, by V. Kudela.  
CZECH, per, Uhli, Vol 9, 1967, pp 367-370.  
\*BISI 6179

Prospect for the Use of Sodium Methyl Silanolate  
in the Manufacture of Filier Products, by  
L. Kosnac.  
CZECH, per, Zvaranie, Vol 15, Oct 1966, pp 301-  
303.  
BISI 5931

Decarburised Steel Plate, by G. de Witte.  
DUTCH, per, Constructiematerialen, Vol 1, Aug  
1967, pp 20-22.  
\*BISI 6177

Interpretation of Creep Tests on Refractory  
Products, by L. Lecrivain & R. Martin.  
FRENCH, per, Bull. Soc. Francaise Ceram., Vol 75,  
Apr-June 1967, pp 25-40.  
\*BISI 6248

Contribution to the Problem of Refractoriness  
Under Load at High Temperature and of Creep for  
Aluminosilicate Bricks, by K. Konopicky.  
FRENCH, per, Bull. Soc. Francaise Ceram., Vol 75,  
Apr-June 1967, pp 41-50.  
\*BISI 6250

A Method of Determining Rolling Power, by  
J. Desvallees.  
FRENCH, per, C.D.S. Circ., Vol 5, 1962, pp 1283-  
1291.  
BISI 5653

Evolution and New Techniques in Hot Stoves, by  
A. Soavini.  
FRENCH, per, C.D.S. Circ., Apr 1966, pp 931-955.  
BISI 5332

Deoxidation of Basic Steel By Injection of Carbon  
Powder into the Converter, by R. Remy.  
FRENCH, per, C.D.S. Circ., Vol 3, 1967, pp 691-703  
\*BISI 6216

**Scientific  
Materials (Contd)**

Study of the Transformation of Steels in Relation to Heat Treatment Problems, by G. Murry & A. Constant.  
FRENCH, per, C.D.S. Circ., Vol 6, 1967, pp 1561-1584.  
\*BISI 5879

The Sintering Plant at the Tarento Works (Italsider), by M. Carignani & A. Chiaverini.  
FRENCH, per, C.D.S. Circ., Vols 7-8, 1967, pp 1741-1765.  
\*BISI 6119

Elements for the Manufacture of Ultrasonic Transducers, by J. Mondot.  
FRENCH, per, C.D.S. Circ., Vols 7-8, 1967, pp 1821-1828.  
\*BISI 6254

Results of Operation of Burden Materials Preparation Plant and Sinter Plant at the Usinor Works at Dunkirk, by J. Dumaine.  
FRENCH, per, C.D.S. Circ., Vol 9, 1967, pp 1981-1997.  
\*BISI 6120

Differdange Works of the Societe Hadir: Influence of Different Parameters of Sinter Manufacture on the Operation and Results of a Blast Furnace, by E. Bintener.  
FRENCH, per, C.D.S. Circ., Vol 11, 1967, pp 2493-2501.  
\*BISI 6238

Dipole Moment of the Double Layer of Metallic Surfaces, by Roger Garron.  
FRENCH, per, Comptes Rendus, Vol 256, 1963, pp 2346-2348.  
\*NASA TT F-11,591

Girders for Crane Runways, by L. de Loringhoven.  
FRENCH, per, Construction Met., Vol 2, June 1967, pp 9-23.  
\*BISI 6194

Forces on Runway Girders. Plate Girders and Horizontal Lattice Bracing, by D. Mateesco & N. Balut.  
FRENCH, per, Construction Met., Vol 2, June 1967, pp 24-37.  
\*BISI 6202

**Scientific  
Materials (Contd)**

Therman Analysis of Cast Iron as a Quality Control Tool, by J. Coppolani & J. C. Margerie.  
FRENCH, per, Fonderie, Vol 243, May, 1966, pp 159-178.  
\*BISI 5673

Melting Cast Iron With Natural Gas, by G. Ulmer.  
FRENCH, per, Fonderie, July 1966, pp. 247-263.  
\*BISI 6136

Experiments on the Part Played by Rust in the Corrosion Process of Steel in Aqueous Media, by E. Herzog.  
FRENCH, per, Met.-Corros.-Ind., Vol 62, Apr 1967, pp 133-151.  
\*BISI 6195

The Effect of Various Additives on the Compatibility of Zirconium with Liquid Sodium, by L. Champeix, W. Graff, 13 pp.  
FRENCH, rpt, IX Colloque de Metallurgie, 1966, pp 63-76.  
P911016768  
AEC ANI-TR-512

Use of Pre-reduced Materials in the Blast Furnace, by J. Michard.  
FRENCH, rpt, Paper Presented at the International Congress on the use of Pre-reduced Ores, Evian, May 29-31, 1967, pp 26.  
\*BISI 5725

Definition and Manufacture of Forgings Used in Welded Constructions, by P. F. Martin & R. Bondot.  
FRENCH, rpt, Paper presented at the International Forging Conference, Sept 1967, pp 19-21.  
\*BISI 6178

Softening Points of Ores and Sinters, by A. Poos & A. Decker.  
FRENCH, per, R.U.M., Vol 15, Nov 1959, pp 773-783.  
\*BISI 6182

Effect of Ultrasonic Waves on the Chemical and Physico-Chemical Processes, by A. Le Bras.  
FRENCH, per, Rev. Chim. Minerale, Vol 4, No 1, 1967, pp 283-315.  
\*BISI 6196



Scientific  
Materials (Contd)

Electrostatic Separation in a Fluidized Bath,  
by P. Tauberou.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, No 6,  
1967, pp 442-449.  
\*BISI 6205

The Scope of the Cerchar Mill-Dryer for Processing  
Iron Ore, by J. Geoffroy & R. Marcellini.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, July 1967,  
pp 462-470.  
\*BISI 6203

Iron Ore Beneficiation by Magnetizing Reduction  
in a Fluidized Bed, by U. Colombo.  
FRENCH, per, Rev. Ind. Minerale, Vol 49, Jul 1967,  
pp 492-500.  
\*BISI 6247

Influence of Speed of Tempering on the Structure  
of Ti-Al 6% -V4% Alloy Tempered and Dip Hardened,  
by A. Saulnier.  
FRENCH, per, Revue de Metallurgie LVI, No 3, 1959.  
\*ACSI J-4282  
ID 2204003568

Long-Time Corrosion Testing of Various Structural  
Steels in the Atmosphere, Sea and Fresh Water  
(Parts I and II), by Henri Baudot (Part I) and  
Georges Chaudron (Part II).  
FRENCH, per, Revue de Metallurgie, Vol 43, 1946,  
pages 1-67.  
\*Dept of Navy NIC

Theoretical Calculation on the Deoxidation of  
Molten Steel by Methane Bubbling, by N. Faysson  
& A. Rist.  
FRENCH, per, Rev. Met., Vol 62, Feb 1965, pp 121-  
126.  
\*BISI 6170

Brittleness of High-Strength Steel Wire, by J.  
Backer.  
FRENCH, per, Rev. Met., Vol 63, Jun 1966, pp 477-  
487.  
BISI 5423

Effects of Niobium and Nitrogen on the Strength of  
Ferritic-Pearlitic Steel, by J. D. Grouier.  
FRENCH, per, Rev. Met., Vol 63, Nov 1966, pp 939-  
941.  
\*BISI 6153

Scientific  
Materials (Contd)

Some Remarks on the Hot Torsion Rupture of  
Austenitic and Ferritic Alloys, by F. E. White.  
FRENCH, per, Rev. Met., Vol 63, No 12, 1966,  
pp 991-998.  
BISI 5766

The Effect of Bright Annealing on Some Properties  
of Austenitic Stainless Steels, by P. Devore  
FRENCH, per, Rev. Met., Vol 64, No 2, 1967,  
pp 171-175.  
BISI 5730

Tube Rolling on Stretch Reducing Mills, by  
B. Fazan & P. Blain.  
FRENCH, per, Rev. Met., Vol 64, Mar 1967,  
pp 207-225.  
BISI 5702

Considerations on the Energy Balance of a Blast  
Furnace Plant, by J. Szczeniawski.  
FRENCH, per, Rev. Met., Vol 64, Apr 1967, pp 333-  
348.  
\*BISI 6258

Considerations on Automatic Control of the Thermal  
Conditions in a Blast Furnace on the Basis of  
Analysis of the Furnace Waste Gases, by C. Staib.  
FRENCH, per, Rev. Met., Vol 64, May 1967,  
pp 437-446.  
\*BISI 6221

Commercial Use of Electroslag Remelting (ESR  
Process), by L. Antoine.  
FRENCH, per, Rev. Met., Vol 64, Jul-Aug 1967,  
pp 623-634.  
\*BISI 6244

Fatigue Tests and Measurement of Elastic Stresses  
on Steel Wires as a Critical Work-Hardening  
Domain, by N. Theolier.  
FRENCH, per, Rev. Met., Vol 64, Jul-Aug 1967,  
pp 649-652.  
\*BISI 6261

Analysis of Blast Furnace Gases by Solid-Gas  
Chromatography, by G. Jecko & B. Reynaud.  
FRENCH, per, Rev. Met., Vol 64, Jul-Aug 1967,  
pp 681-686.  
\*BISI 6180

Study of Roll Torque in the Shaping Passes,  
by C. Lachenait and J.C. Albert.  
FRENCH, per, Rev. Met., Vol. 64, Oct 1967,  
pp 833-886.  
\*BISI 6133

Scientific  
Materials (Contd)

Some Observations on the Carbides in High-Speed Steels, by L. Colombier.  
FRENCH, per, Rev. Met., Vol 64, Nov 1967, pp 987-994.  
\*BISI 6187

A New Method for Extrapolating the Fracture Time of an Industrial Alloy, by S. Zimmering.  
FRENCH, per, Rev. Met. Mem. Sci., Vol 62, Dec 1965, pp 939-950.  
BISI 5665

Use of Phase Diagrams of Binary Systems for the Calculation of the Heat of Fusion of the Solvent, by A. Ferrier.  
FRENCH, per, Rev. Met. Mem. Sci., Vol 63, Jul-Aug 1966, pp 597-612.  
BISI 5683

Heat Treatment of Heavy Forgings Modern Viewpoints and Future Outlook, by G. Papuli.  
FRENCH, per, Techn. Mod., Vol 59, Mar 1967, pp 105-107.  
BISI 5984

Experimental Study Using a Model for Simulating the Vacuum Treatment of Metals, by P. Karinthi.  
FRENCH, per, Le Vide (Paris), No 120, Nov/Dec 1965, pp 413-425.  
HB 6833

Procedure for Rendering Metals Especially Iron and Steel Rust Resistant, and Materials used for this Purpose, by William H. Cole, 7 pp.  
FRENCH, Patent No 647,314, 5 pp.  
ACSI J-4324  
ID 2204004968

Procedure for Protecting Metals, Particularly Iron and Steel, Against Rust, and for Derusting Iron and Steel Objects, by William H. Cole, 3 pp.  
FRENCH, Patent No 648,106, 2 pp.  
ACSI J-4325  
ID 2204005068

Pass Reduction Computer for Roll Screwdown as an Example of a Special Purpose Digital Computer, by H. M. Heinen, A. Krock.  
GERMAN, per, AEG Mitt., Vol 54, No 11/12, 1964, pp 684-689.  
BISI 5251

Scientific  
Materials (Contd)

Application of Chemical Kinetics to Iron-making Processes, by L. von Bogdandy.  
GERMAN, per, Allg. Prakt. Chem., Vol 18, No. 3, 1967, pp. 58-63.  
\*BISI 6116

Development of Internal Stresses in Deformed Steels - Part II, by K. Kolb and E. Macherauch.  
GERMAN, per, Arch Eisenh., Vol 36, Jan 1965, pp 18-27.  
BISI 5405 Pt. II

New Investigations of Methods of Preparing Metal Specimens for Optical Emission Spectrum Analysis, by P. Holler.  
GERMAN, per, Arch Eisenh., Vol 37, Jun 1966, pp 483-489.  
BISI 5365

Investigation of the Transformation Behaviour of Iron-Manganese Alloys by Damping Measurements in the Region of 1 Cycle/Sec, by E. Schmidtman.  
GERMAN, per, Arch Eisenh., Vol 37, Jul 1966, pp 561-567.  
BISI 5535

Investigations on Reduced Layers of Iron Oxide by Means of the Surface Diffraction of Electrons and of the Optical Microscope, by J. Baurmann.  
GERMAN, per, Arch Eisenh., Vol 37, Sep 1966, pp 691-695.  
BISI 5448

Structural Changes and their Importance for Creep-Rupture Strength: Example of a Cr-Mo Steel, by A. Krisch & F. K. Naumann.  
GERMAN, per, Arch. Eisenh., Vol 37, Sept 1966, pp 749-757.  
\*BISI 6214

Structural Changes Occurring in Steels Having High Strength at Elevated Temperatures, by K. Relander & T. Geiger.  
GERMAN, per, Arch. Eisenh., Vol 37, Nov 1966, pp 877-906.  
\*BISI 6227

Testing the Mechanical Properties of Hardened Steels in Static Bending Tests, by E. Ruckerl.  
GERMAN, per, Arch. Eisenh., Vol 38, Jan 1967, pp 41-47.  
BISI 5565

Scientific  
Materials (Contd)

Study on Nitriding Pure Iron, by K. Bohnenkamp.  
GERMAN, per, Arch. Eisen., Vol 38, Mar 1967, pp 229-232.  
\*BISI 6155

Isolation of Carbides by Dissolving Steel in Nitric Acid, by H. Kellor & K. H. Sauer.  
GERMAN, per, Arch. Eisenh., Vol 38, June 1967, pp 429-433.  
\*BISI 6197

Kinetics of Reactions of Ferrous, Nickel and Cobalt Oxides with Graphite, by H. K. Kohl & B. Marincek.  
GERMAN, per, Arch. Eisenh., Vol 38, July 1967, pp 493-500.  
\*BISI 6223

Decarburisation Rate and Decarburisation During the manufacture of Steel by Oxygen Top Blowing, by K. Borowski.  
GERMAN, per, Arch. Eisenh., Vol 38, Jul 1967, pp 501-507.  
BISI 5878

Contribution to the Knowledge of the Phenomena Occurring during Reduction of Pure Iron Oxides I. - Investigations on the Kinetics of Reduction of Iron Oxides Considering Particularly the Porosity as well as the Absolute and Partial Pressure of the Component of the Gas Phase, by H. Schenck.  
GERMAN, per, Arch. Eisen., Vol 38, Aug 1967, pp 577-584.  
\*BISI 6165

Reactions Occurring During the Formation of Primary Decaridation Products in Steel, by H. Straube, G. Kuhnelt.  
GERMAN, per, Archiv Eisenhüttenwesen, Vol 38, No 8, 1967, pp 607-615.  
HB 7259-I

Isothermal Martensite Formation in Fe-Mn-C Alloys, by E. Schmidtman.  
GERMAN, per, Arch. Eisenh., Vol 38, Aug 1967, pp 639-645.  
\*BISI 6222

Martensitic Transformations in Low-Carbon Manganese Steels, by H. Schumann.  
GERMAN, per, Arch. Eisenh., Vol 38, Aug 1967, pp 647-656.  
\*BISI 6229

Scientific  
Materials (Contd)

Comprehensive Representation of the Reduction Kinetic of Dense Ores, by R. Jeschar.  
GERMAN, per, Arch. Eisenh., Vol 38, No 9, 1967, pp 663-665.  
\*BISI 6237

Contribution to the Knowledge of the Phenomena Occurring During the Reduction of Pure Iron Oxides. II - Change of Properties of Iron Oxides With Increasing Reduction Degree, by H. Schenck.  
GERMAN, per, Arch. Eisenh., Vol 38, No 9, 1967, p 669.  
\*BISI 6236

Formation of Etch Pits on Decorated Dislocations in Iron-Silicon Alloys, by W. Schaarwachter.  
GERMAN, per, Arch. Eisenh., Vol 38, Oct 1967, pp 805-808.  
\*BISI 6175

Contribution to the Crystallographic Analysis of Phase Transformations in Metals, by W. Pitsch.  
GERMAN, per, Arch. Eisen., Vol 38, Nov 1967, pp 853-864.  
\*BISI 6160

Simultaneous Rapid Determination of Oxygen and Nitrogen in Steel by the Helium Carrier Method, by W. Koch & H. Lamm.  
GERMAN, per, Arch. Eisen., Vol 38, No 12, 1967, pp 881-885.  
\*HB 7364

Problem of Sensitivity to Red Shortness of Low Carbon Rimmed Steels, by W. Scholz & H. Dautzenberg.  
GERMAN, per, Arch. Eisen., Vol 38, No 12, 1967, pp 915-920.  
\*HB 7365

Possibilities of Influencing Palletising Pan Operation and their Effects on the Properties of the Palletised Material, by W. Pietsch.  
GERMAN, per, Aufbereitungs-Technik, Apr 1966, pp 177-191.  
BISI 5140

Bin Discharging Devices, by W. Hoormann.  
GERMAN, per, Aufbereitungs-Technik, No 10, 1967, pp 521-537.  
\*BISI 6151

Scientific  
Materials (Contd)

Manufacture of Spirally Welded Tubes, by W. Wennemann.  
GERMAN, per, Bänder Bleche, No 6, 1963, pp 278-281.  
BISI 5552

Spirally Welded Tubes - Properties and Certain Possibilities of Application, by W. Schmidt and F. O. Koch.  
GERMAN, per, Bänder Bleche, No 6, 1963, pp 298-304.  
BISI 5554

The Latest Gauge Control Units for Cold-Rolling Mills, by O. Steinbrecher.  
GERMAN, per, Bänder Bleche, Vol 4, 1966, pp 225-234.  
\*BISI 6219

The Mechanical Properties of Cemented Tungsten Carbide-Cobalt Alloys in Relation to the Structure, by H. Fischmeister, H. E. Exner.  
GERMAN, per, Bänder Bleche, Vol 8, No 3, 1967, pp 143-149.  
BISI 5699

Fully Automatic Hot Finishing on a Continuous Tube Mill, by D. Grube.  
GERMAN, per, Bänder Bleche, Vol 8, June 1967, pp 368-371.  
\*BISI 6203

Cooling of Ferritic Tubes in Still Air as a Function of Tube Size, and Their Mechanical Properties, by H. Muhs.  
GERMAN, per, Bänder Bleche, Vol 8, Oct 1967, pp 667-671.  
BISI 6047

Review of Cross-Roll Cold-Straighteners for Steel Tubes, by J. Vogt.  
GERMAN, per, Bänder Bleche, Vol 8, Oct 1967, pp 681-683.  
\*BISI 6213

Non-Destructive Testing of Quality Tubes in Production, by K. Fink.  
GERMAN, per, Bänder Bleche, Vol 8, No 11, 1967, pp 729-735.  
\*BISI 6176

Scientific  
Materials (Contd)

Glass-Fiber Reinforced Plastics for Supporting Constructions, by G. Hintersdorf.  
GERMAN, per, Bauplanung Bautechnik, No 11, 1967, pp 538-543.  
\*ACSI J-4319  
ID 2204004468

Relationship Between Properties and Service Life of Tar-Dolomite Bricks in Oxygen Converters, by P. Hammerschmid.  
GERMAN, per, Ber. DKG, Vol 44, No 7, 1967, pp 343-344.  
\*BISI 6198

Mineralogical Investigations on the Wear of Tar-Dolomite and Tar-Magnesite Bricks in Oxygen Converters, by R. Euler.  
GERMAN, per, Ber. Dtsch. Keram. Ges., Vol 44, No 7, 1967, pp 345-347.  
\*BISI 6256.

Change in Basic Bricks in Oxygen Converters, by W. S. Treffner & K. Wohlleben.  
GERMAN, per, Ber. DKG, Vol 44, No 7, 1967, pp 350-354.  
\*BISI 6193

The Formation of Different Phases in a Molten-Cast Magnesia-Chrome Brick (Corhart 104) in Relation to the Temperature, by J. Recasens, 12 pp.  
GERMAN, per, Ber. Dtsch. Keram. Ges., No 44, 1967, pp 366-369.  
P911013868  
AEC NP-TR-1587

Investigations on the Bonding of Refractories with a Solution of Monaluminium Phosphate, by E. Kupzog.  
GERMAN, per, Ber. Dtsch. Keram. Ges., Vol 44, No 9, 1967, pp 445-452.  
\*BISI 6257

The Action of Furnace Atmospheres, and the Use of Protective Atmospheres, in Hot and Cold Deformation of Steel, by W. Wirth.  
GERMAN, per, Berg-Hütten. Monatsh., No 110, Jul 1965, pp 222-231.  
BISI 5791

Determination of Residual Austenite by Means of Differential Thermal Analysis (DTA), by J. J. Dicht.  
GERMAN, per, Berg-Hütten. Monatsh., Vol 111, Sept 1966, pp 430-437.  
\*BISI 6181

Scientific  
Materials (Contd)

The Continuous Casting of Roller and Ball Bearing Steel, by W. Poppmeier and B. Tarmann. GERMAN, per, Berg- und Hutten Monatshefte, Vol 112, No 9, 1967, pp 249-255. HB 7329

Precision Forged Turbine Blades, Manufacture, Properties and Materials, by H. Tarmann. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 351-361. \*BISI 6240

Improvement of Steel Quality By Tap Degassing, by R. Plessing. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 361-371. \*BISI 6226

Hydromechanical Descaling in Rolling Mills Using an Operating Pressure of Up to 200 Ats Gauge, by H. Hojas & R. Rheindt. GERMAN, per, Berg- Hutten. Monatsh., Vol 112, Nov 1967, pp 372-379. \*BISI 6241

Power Problems in Austrian Steelworks, Particularly as Regards Natural Gas Within a Framework of a Greater Power Economy, by K. Rieder and H. Tichy. GERMAN, per, Berg-Hutten Monatsh., Vol 112, No 11, 1967, pp 394-402. \*BISI 6162

Scientific Work in the Chemical Fiber Industry. 7 pp. GERMAN, per, Berliner Zeitung, No 350, 20 Dec 1967, p 3. JPRS 44069

Corrosion Protection in Reinforced and Prestained Concrete, by S. Soretz. GERMAN, per, Betonsteintg., Vol 33, No. 2, 1967, pp. 52-63. \*BISI 6138

A New Cross Dividing Plant for Mannesmann A.G. at the Huckingen Steelworks. Part III, by W. Unger. GERMAN, per, Blech., No. 3, 1967, pp. 106-109. \*BISI 6107

The Elasticity of Tinplate and its Importance for the Use of Thinner Sheet Metal Types, by H. Wyss. GERMAN, per, Blech, Vol 14, No 5, 1967, pp 252-253. \*BISI 6235

Scientific  
Materials (Contd)

The Effect of Inert Materials on the Coking Behaviour of a Coking Coal and on the Quality of the Coke Produced from Mixtures, by R. Agricola. GERMAN, per, Brennstoff-Chemie, Vol 43, No 8, 1967, pp 240-252. \*BISI 6252

The Results of Electrochemical Investigations of Stress Corrosion Cracking and Their Practical Application, by H. Grafen. GERMAN, per, Corros. Sci., Vol 7, Apr 1967, pp 177-195. \*BISI 6192

Investigations of Thin Oxide Layers, Pt. I - Oxidation of Pure Iron at Temperatures Around 200°C, by R. Grauer & W. Feitknecht. GERMAN, per, Corros. Sci., Vol 6, Jul 1966, pp 301-311. BISI 5410

Tool Steels in the Plastic Forming of Screws, Bolts and Nuts, by W. Haufe. GERMAN, per, Draht, Vol 18, Aug 1967, pp 624-635. \*BISI 6154

The Use of Protective and Reaction Gases in the Heat Treatment of Cold-Formed Bright Steel, by W. Wirth. GERMAN, per, Draht-Welt, Vol 53, Jul 1967, pp 467-472. \*BISI 6156

Investigations to Reduce Network Disturbances Caused by Electric Arc Furnaces, by K. Kegel. GERMAN, per, Electrowarme, Vol 6, June 1967, pp 203-208. \*BISI 6172

The Significance of the Preliminary Treatment for the Durability of Various Rust-Resistant Coating Systems, by B. Andersson and G. Ekwall. GERMAN, per, Farbe u Lack, Vol 71, Jul 1965, pp 534-546. BISI 4827

Advances in the Technology of Tinplate, by W. E. Hoare. GERMAN, per, Forschungsges. Blechverarb. Hdt., Vols 4/5, 1966, pp 54-60. BISI 5971

Scientific  
Materials (Contd)

Design and Construction of a Pilot Plant for  
Electroslag Melting, by W. Richling.  
GERMAN, per, Freiberger Forschungsh.,  
Vol. B122, 1966, pp. 143-154.  
\*BISI 6103

Practical Experience from the Experimental  
Operation of a 1 Ton Electroslag Remelting  
Plant, by G. Holfert, et al.  
GERMAN, per, Freiberger Forschungsh., Vol.  
B122, 1966, pp. 155-168.  
\*BISI 6104

Conversion of a Steelworks Gas Supply from Blast  
Furnace and Coke-Oven Gas to Natural Gas, by G.  
Fechner.  
GERMAN, per, Gaswarme, Vol 15, Jul 1966, pp 224-  
233.  
BISI 5362

Simple Apparatus for Accelerating Metallurgical  
Reactions, by J. E. Ostberg.  
GERMAN, per, Giesserei, Vol 53, No 24, 1966,  
pp 816-818.  
BISI 5850

Compression Characteristics of Moulding Sands, by  
W. Siefert.  
GERMAN, per, Giesserei, Vol 54, 13 Apr 1967, pp  
197-207.  
\*BISI 6163

The Development of Cast Iron with Particular  
Characteristics, by H. Mayer.  
GERMAN, per, Giesserei, Vol 54, 28 Sep 1967,  
pp 522-526.  
\*BISI 6142

Methods for Inoculation of Liquid Cast Irons, by  
K. Reifferscheid.  
GERMAN, per, Giesserei, Vol 54, No 23, 1967, pp  
621-624.  
HB 7352

Desulphurization of Cast Iron by Treating it  
with Calcium Carbide, by D. Gleisberg.  
GERMAN, per, Giesserei, Vol 55, No 1, 1968,  
pp 1-7.  
\*HB 7380

Scientific  
Materials (Contd)

Desulphurization of Cast Iron with Calcium  
Carbide in a Basic-Lined 3-Ton Shaking Ladle,  
by D. Schürmann & W. Dohner.  
GERMAN, per, Giesserei, Vol 55, No 1, 1968,  
pp 7-14.  
\*HB 7381

Eutectic Solidification of Iron-Carbon Alloys,  
by F. Henke.  
GERMAN, per, Giesserei-Praxis, Vol 21, Nov 1967,  
pp 391-407.  
\*BISI 6188

Metallurgy and Melting Technique of a Water-  
Cooled Hot-Blast Cupola, Part I, by D.  
Logothetis.  
GERMAN, per, Giesserei Techn.-Wiss. Beihefte,  
Vol 17, No 1, 1965, pp 29-37.  
HB 6639-I

The Mechanism of Hot-Tearing, Particularly  
of Steel Castings, by W. Patterson et al.  
GERMAN, per, Giessereiforschung, Vol 19,  
No. 3, 1967, pp. 151-160.  
\*BISI 6129

Studies on Hot-Tearing in Steel Castings, by W.  
Patterson.  
GERMAN, per, Giessereiforschung, Vol 19, No 4,  
1967, pp 161-174.  
\*BISI 6168

Experiences in Determining Fatigue Strength  
of Thin-Sectioned, Case-Hardened Specimens of  
High Strength, by R. Chatterjee-Fischer &  
O. Schanber.  
GERMAN, per, Hart.-Techn. Mitt., Vol 6, Jan 1,  
1960.  
BISI 5912

Fatigue Tests on Steel Specimens Coated  
With a Sprayed Metal Deposit, by H.D. Steffens  
and H. Bastert.  
GERMAN, per, Hart.-Techn. Mitt., Vol. 22,  
1967, No. 3, pp. 221-232.  
\*BISI 6106

The Development of Deep-Drawing Qualities for  
Sheet at Hoesch A. G., by H. Hoff.  
GERMAN, per, Hoesch Ber., Vol 1, 1966, pp 7-15.  
\*BISI 6215

Scientific  
Materials (Contd)

New Methods for Securely Clamping Hard Metals in the Workshop, by E. Kirchner, Chr. Lewicki.  
GERMAN, per, Industrie-Anzeiger, Vol 3, 10 Mar 1959, pp 285-290.  
\*BISI 5357

Lacquer Hardening by Electron Radiation, by I. Kuhn.  
GERMAN, per, Industrie-Lackier-Betrieb, Vol 35, No 6, 1967, pp 233-237.  
\*BISI 5841

Adhesive Bonding Forces in Glass-Fiber Reinforced Plastics, by G. Ehrenstein, 21 pp.  
GERMAN, per, Institut A für Werkstoffkunde der Technischen Hochschule, Hannover, P500025168  
Dept of Navy/NIC Tr No 2516

The Technical Rolling Aspects of a Continuous Semi-Finished Products Mill with a Wide Programme and High Output, by H. Muckli.  
GERMAN, per, Der Kalibreur, Mar 1967, pp 59-76.  
\*BISI 5770

Continuous Rolling of Continuous Cast Bars and Slabs, by A. Jakomaski.  
GERMAN/FRENCH, per, Kalibreur, Aug 1967, pp 49-60.  
\*BISI 6174

Continuous Casting of Quality Steels on a Bow-Type Machine, by B. Tarmann and W. Poppmeier.  
GERMAN, per, Kleppzig Fachber., E 219, Oct. 1967, pp. 628-632.  
\*HB 7343

Further Development of Atmospheric Corrosion-Resistant Steels, by K. Daeves.  
GERMAN, per, Kohle- und Eisenforschung G.m.b.H. Mitt., Feb 1935.  
\*BISI 6242

The Testing and Behavior of Metallic Materials against the Striking of Drops and Cavitation, by M. Vater, 31 pp.  
GERMAN, per, Korrosion und Metallschutz, Vol 20, No 6, Jun 1944, pp 171-179. P500025368  
Dept of Navy/NIC Tr No 2506

Scientific  
Materials (Contd)

External Coating of Pipes with PVC by Turbulence Sintering, by E. Gemmer.  
GERMAN, per, Kunststoffe, Vol 57, No 1, 1967, pp 21-24.  
\*BISI 6159

Ternary Phase  $Fe_{23}C_3B_3$  in the Ternary System, Iron, Carbon, Boron, by H. H. Stadelmaier and R. A. Gregg.  
GERMAN, per, Metall, Vol 17, May 1963, pp 412-414.  
\*BISI 6166

Determining Cutting Edge Temperatures During the Cutting Operation, by H. G. Wiebach.  
GERMAN, per, Metall, Vol 21, No 6, 1967, pp 612-615.  
\*BISI 6056

The Electrodeposition of Iron-Chromium-Nickel Alloys from Sulphate Triethanolamine Solutions, by M. Sarojamma and T. L. Rama Char.  
GERMAN, per, Metalloberfläche, Vol 21, No 11, 1967, pp 334-335.  
\*BISI 6167

The Present State of Progress in Direct-On One-Coat Enamelling, by A. Dietzel.  
GERMAN, per, Metalloberfläche, Vol 21, Dec 1967, pp 372-373.  
\*BISI 6230

Direct-On Enamelling, by H. Hoffmann.  
GERMAN, per, Metalloberfläche, Vol 21, Dec 1967, pp 374-375.  
\*BISI 6186

Flow Resistance in Blast Furnace Burden Materials, by K. Scheidig and G. Gruson.  
GERMAN, per, Neue Hütte, Vol 11, Jul 1966, pp 385-390.  
\*BISI 5585

Automation and Process Control of Blast Furnaces and Oxygen Converters, by P. Cesselin.  
GERMAN, per, Neue Hütte, Vol 11, Oct 1966, pp 583-591.  
\*BISI 6233

Tendencies in the Development of High-Strength Weldable Structural Steel: Alloying with Nb, V, Ti, Zr, etc., by F. Stadler.  
GERMAN, per, Neue Hütte, Vol 11, Oct 1966, pp 606-608.  
\*BISI 6231

Scientific  
Materials (Contd)

Production and Properties of St45/60 Steel, by  
H. Loscher.  
GERMAN, per, Neue Hutte, Vol 12, Aug 1967,  
pp 475-481.  
\*BISI 6234

Determination of Molybdenum in Special Materials,  
by I. Sajo.  
GERMAN, per, Neue Hutte, Vol 12, No 8, 1967,  
pp 500-502.  
\*BISI 6251

Development of the Plasma Melting Process, by  
F. Ebeling.  
GERMAN, per, Neue Hutte, Vol 12, No 9, 1967,  
pp 546-550.  
HB 7291-II

Continuous Casting of Steel in Poland, by  
B. Paczula.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 655-658.  
\*HB 7371

Results Obtained in the Manufacture and Use of  
Nodular-Iron Steel Mill Ingot Moulds, by  
K. Schneider.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 656-661.  
\*HB 7378

Production, Properties, and Applications of  
Whiskers, by E. Norgentha.  
GERMAN, per, Neue Hutte, Vol 12, No 11, 1967,  
pp 681-685.  
\*HB 7376

Improved Pouring of Steel by Use of Synthetic  
Exothermic Slag, by L. Rietz.  
GERMAN, per, Neue Hutte, Vol 12, No 12, 1967,  
pp 714-718.  
\*HB 7377

The Opening Up of New Areas of Use for Zinc  
Coated Strip and Sheet by the Development of  
Continuous Wide Strip Galvanising Lines, by  
R. Haarmann.  
GERMAN, per, Oberflächentechnik Jahrbuch, Vol 22,  
1966, pp 158-165.  
\*BISI 6218

Scientific  
Materials (Contd)

Metallographical Problems with the Hot Working  
of Steels, by W. Dahl.  
GERMAN, rpt, Paper from the Symposium on Metal-  
lurgical Problems in Hot Working, 1966, 15 pp.  
BISI 5583

On the Influence of Oxyde Impurities in Ferro-  
Chromium on the Degree of Purity of Chromium  
Steels, by A. Schoberl.  
GERMAN, per, Radex Rund., Feb 1966, pp 34-50.  
\*BISI 6217

On the Formation of Comets in Polishing  
Sheets of Corrosion-Resistant Austenitic  
Steel, by F. Bauer and J. Riedl.  
GERMAN, per, Radex Rund., Aug 1967, pp.  
635-640.  
\*BISI 6121

High-Temperature Properties of Plastic Lubricants,  
by E. F. Vamos.  
GERMAN, per, Schmieretechnik, Vol 14, No 6, 1967,  
pp 299-303.  
\*HB 7379

Fundamentals of Magnetic Pulse Welding, by F.  
Erdmann-Jesnitzer and E. Feustel.  
GERMAN, per, Schweißen und Schneiden, Vol 19,  
No 1, 1967, pp 2-9.  
HB 7216

Concerning the Corrosion Characteristics of  
Ferrous and Non-Ferrous Metals in the Presence  
of Cement and Mortar, by A. Bukowiecki.  
GERMAN, per, Schweis Arch Wiss Techn, Vol 31,  
No 9, 1965, pp 273-293.  
BISI 5453

Filler Surface Preparation for Improvement  
of the Moisture Stability of Epoxy and Poly-  
ester Casting Resins, by S. Kopniczky and  
K. Kelemen, 16 pp.  
GERMAN, rpt, Second International Symposium  
on Glass Fiber Reinforced Plastics,  
Mar 13-17, 1967, pp D10/1-D10/8.  
P500019468  
Dept of Navy/NIC Trans No 2503



Scientific  
Materials (Contd)

The Deformation Strength of Steel C 45 Against Hot Pressing at Medium Deformation Rates, by W. Lueg & U. Krause.  
GERMAN, per, Stahl Eisen, Vol 80, Aug 4, 1960, pp 1061-1067.  
BISI 5706

Shearing Force Measurements on a Mechanically Working 2000-Ton Ingot-Slab Shear, by M. Vater.  
GERMAN, per, Stahl Eisen, Vol 87, 9 Mar 1967, pp 255-263.  
\*BISI 6148

Temperature Distribution in the Hearth of a Blast Furnace with an Air-Cooled Hearth Bottom, by R. Wartmann, H. Mertes.  
GERMAN, per, Stahl und Eisen, Vol 87, No 7, 1967, pp 337-363.  
HB 7252

I - Effect of Increased Coil Weights on the Properties of Wire Rod and On Its Preparation for Drawing, by H. J. Bockenhoff.  
GERMAN, per, Stahl Eisen, Vol 87, July 13, 1967, pp 834-854.  
\*BISI 6225

Reducing the Susceptibility of Nickel-Chromium Heat Treatable Steel to Hair-Line Cracking, by A. Wittmoser & N. Noerenberg.  
GERMAN, per, Stahl Eisen, Vol 87, Jul 27, 1967, pp 904-911.  
BISI 5933

Pelletizing Iron Ores with the Use of Pre-Roasted Material, by W. Wenzel and H. W. Gudensau.  
GERMAN, per, Stahl und Eisen, Vol 87, No 16, 1967, pp 933-938.  
HB 7233

Flow Tests with Models in the Development of Suction Offtakes for Converter Waste Gases, by H. Boenecke & M. Hansen.  
GERMAN, per, Stahl Eisen, Vol 87, Aug 10, 1967, pp 951-958.  
BISI 5913

Contribution to the Analysis of Water in Lime, by W. Thomich, H. Taxhet.  
GERMAN, per, Stahl Eisen, Vol 87, Sept 21, 1967, pp 1140-1143.  
\*BISI 6135

Scientific  
Materials (Contd)

Formation of Oxide Layers on Cemented Carbide Machine Tools During the Machining of Steel, by A. Wicher and R. Pape.  
GERMAN, per, Stahl Eisen, Vol 87, 5 Oct 1967, pp 1169-1178.  
\*BISI 6161

Change in the Material Caused by Annealing Open Coiled, Cold Rolled Wide Strip, by P. Werthebach.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1233-1241.  
\*BISI 6140

Present State of the Efficiency of Open Coil Annealing, by J. Wesseling.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1242-1248.  
\*BISI 6141

Calculations Concerning High Speed Cooling in Bell and Pot Annealing Furnaces, by G. Woalk.  
GERMAN, per, Stahl Eisen, Vol 87, No 21, 1967, pp 1249-1255.  
\*BISI 6139

Protective Atmospheres for Bright Annealing of Austenitic Chromium-Nickel Steels, by F. Kohlmeier and H.-J. Pohle.  
GERMAN, per, Stahl Eisen, Vol. 87, Oct. 19, 1967, pp. 1256-1261.  
\*BISI 6128

Investigations on the Loading of the Main Drive of a Blooming Slabbing Mill with the Aid of a Multiple Channel Analyser, by M. Proske.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1315-1321.  
BISI 6124

Process of Constant Heat Exchange at High Temperatures, by H. Sonnenschein.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1348-1355.  
BISI 6125

The Effect of Boron on the Properties of Structural and Tool Steels, by H. Treppschuh.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 2, 1967, pp 1355-1368.  
BISI 6058

Scientific  
Materials (Contd)

Continuous Casting of Wide Slabs, by H. Schrewe.  
GERMAN, per, Stahl Eisen, Vol 87, No. 22,  
1967, pp. 1372-1375.  
\*HB 7339

Determination of Acid-Soluble Boron in Case-  
Hardening Steels, by A. Stettner.  
GERMAN, per, Stahl und Eisen, Vol 87, No 22, 1967,  
pp 1386-1388.  
HB 7341

Method of Cooling Used for a Blast Furnace with  
a Hearth Diameter of 9 M, by G. Schnegelsberg  
& K. P. Roeder.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 16, 1967,  
pp 1422-1428.  
BISI 6127

Production of Semi-Killed Steel in the Basic  
Converter, by G. Bauer.  
GERMAN, per, Stahl Eisen, Vol 87, No 23, 16 Nov  
1967, pp 1435-1443.  
\*BISI 6152

Investigations on Hot Elast Slide Valves, by  
W. Altpeter & G. Schnegelsberg.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1478-1482.  
\*BISI 6183

Analogue Computer Calculations of Rolling Moment,  
by J. Heidepriem & F. Thielecke.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1482-1488.  
\*BISI 6184

Time Studies on Roughing Mills Using Manual  
and Programmed Control, by S. Fegerl.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1488-1494.  
\*BISI 6173

The Iron and Steel Industry of Japan, by J. Bruns.  
GERMAN, per, Stahl Eisen, Vol 87, Nov 30, 1967,  
pp 1510-1514.  
\*BISI 6185

Improved Pouring Bay Efficiency at a Bof Plant  
by Shorter Pouring Times, by R. Hammer.  
GERMAN, per, Stahl Eisen, Vol 87, No 25, 1967,  
pp 1539-1543.  
\*HB 7340

Scientific  
Materials (Contd)

Significance of Quality of Lime in Steelmaking,  
by K. H. Obst and J. Stradtman.  
GERMAN, per, Stahl Eisen, Vol 87, No 25, 1967,  
pp 1543-1546.  
\*HB 7348

Comparison of Cut Wire with Steel Shot Blasting  
Media, by M. Vater and A. Schuetza.  
GERMAN, per, Stahl Eisen, Vol 87, No 26, 1967,  
pp 1586-1589.  
\*HB 7354

Tinning of Steel, by J. Siewert.  
GERMAN, per, Stahl Eisen, Vol 87, Dec 28, 1967,  
pp 1594-1599.  
\*BISI 6200

Operating Practice with Equipment for Automatic  
Control of 170-m Ton Basic Oxygen Furnaces, by  
F. J. Hufnagel.  
GERMAN, per, Stahl Eisen, Vol 88, No 1, 1968,  
pp 1-5.  
\*HB 7362

Continuous Sulphur Removal of b from Basic Iron  
in a Teapot Ladle Outside the Blast Furnace,  
by S. Henkel.  
GERMAN, per, Stahl Eisen, Vol 88, No 1, 1968,  
pp 10-14.  
\*HB 7363

Approximate Assessment of Machinability of Mild  
Free-Cutting Steels, by A. Hauttmann.  
GERMAN, per, Stahl Eisen, Vol 88, Jan 25, 1968,  
pp 62-67.  
\*BISI 6212

Slide-Rule Nomogram for Rapid Conversion of  
Numerical and Gravimetric Concentrations of  
Industrial Dusts, by H. Seidel.  
GERMAN, per, Staub-Reinhalt Luft, Vol 26, Aug  
1966, pp 329-332.  
BISI 5369

The Use of Aluminium, Titanium, Zirconium and  
Nitrogen Additions in the Production of High  
Speed Steels, by G. Richau.  
GERMAN, per, Die Technik, Vol 18, Jul 1963, pp  
473-475.  
BISI 5311

Scientific  
Materials (Contd)

Studies About Suitable Spray Nozzles for the Secondary Cooling Side of a Continuous Casting Machine, by H. Graichen.  
GERMAN, per, Technik, Vol 22, No 8, 1967, pp 500-503.  
\*HB 7357

Design and Supplication of a Two-Dimensional Hydraulic Analogy Model for Continuous Casting Problems, by H. Stecher.  
GERMAN, per, Technik, Vol 22, No 8, 1967, pp 503-507.  
\*HB 7358

Welded Steel Pipes Subjected to High Stresses, by W. Schmdt.  
GERMAN, per, Techn Mitt, Vol 57, Nov 1964, pp 534-541.  
BISI 5551

Report on the Machineability of High Temperature Resistant Materials, by H. Mutze.  
GERMAN, paper, Thesis for Academical Degree of Dr. Ing. approved by the Faculty of Mechanical Engng. of the Rheinisch-Westf. Techn. Hochschule, Aachen.  
\*BISI 6132

Rapid Control Testing of Foundry Ancillary Products, by C. Pelhan and B. Dobovisek.  
GERMAN, per, 34th International Foundry Congress, Paper No. 13, Oct 1967.  
\*BISI 6134

Damage in the Fatigue Testing of High Strength Steel, by K. Wellinger & H. Gassmann.  
GERMAN, per, V.D.I. Z., Vol 108, 1966, pp 1535-1542.  
\*HB 7372

Precise Calculation of Optimum Diameter Ratios of Externally Heated Tubes with Internal Pressure, by E. Ulrich.  
GERMAN, per, V.G.B. Mitt., Vol 56, Oct 1958, pp 354-357.  
\*BISI 6243

The Welding of Spheroidal Graphite Cast Iron, by W. Hummelsch and G. Juretsko.  
GERMAN, per, Werkstatt und Betrieb, Vol 100, No 6, 1967, pp 437-442.  
HB 7285

Scientific  
Materials (Contd)

Sampling of Pig and Cast Iron for Spectrometric Analysis of Emissions, by G. Staats.  
GERMAN, per, Z. anal. Chemie, Special Print, Vol 230, No 3, 1967, pp 184-188.  
\*BISI 6245

Directional Ordering and its Effect Upon the Magnetic Properties of Solid Solutions of Metals, by G. Rassmann.  
GERMAN, per, Z. Angew. Phys., Vol 21, No 4, 1966, pp 323-330.  
BISI 5606

Order/Disorder and Infrared Absorption. IV. Absorption of Some Metal Oxides with Spinel Structure, by Stefan Hafner.  
GERMAN, per, Zeitschrift fur Kristallographie, Vol 115, 1961, pp 331-358.  
\*NASA TT F-11,587

Residual Stresses in Cold Drawn Tube and Bar Stock Determined Mechanically as Against by X-Ray Diffraction, by F. Bollenrath.  
GERMAN, per, Z. Metallk., Vol 55, No 11, 1964, pp 655-659.  
\*HB 7366

The Deformability of Technical Materials at High Strain Rates, by K. Matthes.  
GERMAN, per, Z. Metallk., No 57, Jan 1966, pp 8-11.  
BISI 5434

Absolute X-Ray Fluorescence Analysis, by H. Ebel.  
GERMAN, per, Z. Metallk., Vol 57, June 1966, pp 454-457.  
BISI 5670

Hexagonal Crystalline Structure of Fe Alloys With Transition Metals, by H. Schumann.  
GERMAN, per, Z. Metallk., Vol 58, No 3, 1967, pp 207-210.  
\*BISI 6206

1. Considerations on Design and Accuracy to Size of Extrusion Dies, by B. Heinen.  
2. Maintenance of the Extrusion Dies Under Service Conditions, by F. Kleinow.  
GERMAN, per, Zeit Metallk., Vol 58, 1967, No 4, pp 215-220.  
BISI 5731

Scientific  
Materials (Contd)

The Structure and Mechanical Properties of a Nickel-Iron-Base Alloy Containing Aluminium and Titanium After Undergoing Different Thermal and Thermomechanical Treatments, by E. Hornbogen and W.A. Meyer. GERMAN, per, Z. Metallk., Vol. 58, No. 7, 1967, pp. 445-449.  
\*BISI 6130

Potentialities and Limits of Salt-Bath Nitriding of Constructional Steels, by C. Razim. GERMAN, per, Z. Wirtschaftliche Fertigung, Vol. 62, Sep 1967, pp 439-447.  
\*BISI 6143

The Influence of Inclusions on Steel Sheet of Type St 52-3, by K. Mrosko. GERMAN, per, ZIS, Halle Mitteilungen, Vol 7, Nov 1966, pp 1563-1569.  
\*BISI 6158

Plasticity Theory in Strip Extruding, by Osmo Piispanen, 4 pp. GERMAN, bk, Zur Plastizitätstheorie des Strangpressens von Bandern, 1967.  
ACSI J-3487  
ID 2204045467

National Materials Handling Conference. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 1-2.  
ACSI J-3897  
ID 2204058267

Situation and Development of Materials Handling in Hungary. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 2-9.  
ACSI J-3897  
ID 2204058267

Activity of the Hungarian-Bulgarian Company. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 9-18.  
ACSI J-3897  
ID 2204058267

Development of the Manufacture of Materials Handling Machinery in Hungary. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 19-21.  
ACSI J-3897  
ID 2204058267

Scientific  
Materials (Contd)

Education of Materials Handling Engineers at the Budapest Technical University. HUNGARIAN, per, Anyagmozgatas Csomagolas, Sep-Oct 1967, pp 22-27.  
ACSI J-3897  
ID 2204058267

The Role and Utilization of Technical Information in Metallurgy, by G. Ivan. HUNGARIAN, per, Koh. Lapok, Vol 99, No 6, 1966, pp 261-266.  
BISI 5819

Example of Quantitative Analyses with the Use of the Electron Probe Microanalyzer, by O. Caloni and A. Ferrari. ITALIAN, per, La Metallurgia Italiana, Vol 58, No 8, 1966, pp 330-334.  
HB 6992

Hot Rolling of Wide Sheet. Aspects Related to the Quality of the Finished Product, by E. Gabbini, et al. Italian, per, Met. Ital., Vol. 58, June 1967, pp. 437-444.  
\*BISI 6122

Contribution to the Development of New High-Strength Structural Steels with Good Toughness Properties, by P. Brozzo & V. Berruti. ITALIAN, per, Met. Ital., Vol 59, No 4, 1967, pp 247-255.  
\*BISI 6189

The Effect of Nitrogen and Aluminium on the Ductility and the Drawability of High Carbon Steel for Large Diameter Wire Drawing, by M. Mazzanti & R. Passeri. ITALIAN, per, Met. Ital., Vol 59, No 6, 1967, pp 445-452.  
\*BISI 6199

Effect of Bonding Agents Upon the Properties of Tar-Bonded Refractories, by G. Aliprandi. ITALIAN, per, Met. Ital., Vol 59, No 9, 1967, pp 693-698.  
\*HB 7386

Effect of Lime Quality and Hot Metal Composition in Bop Viewed from the Qualitative and Economic Standpoint, by P. Meschi & C. Sabato Ceraldi. ITALIAN, per, Met. Ital., Vol 59, No 9, 1967, pp 748-752.  
\*HB 7385

Scientific  
Materials (Contd)

Outline of IHI Blast Furnace Cooling System.  
JAPANESE, per, Ishikawajima-Harima Eng. Rev.,  
Vol 35, May 1967, pp 291-298.  
\*BISI 6239

Research on Trace Elements in Iron and Steel  
(Report No 3) Concerning Titanium and Zirconium  
Nitrides in Iron and Steel, by K. Narita.  
JAPANESE, per, J. Chem. J. of Japan, Vol 70,  
1956, pp 1536-1539.  
\*BISI 6260

Research on Trace Elements in Iron and Steel  
(Report No. 7 [17]), by K. Narita.  
JAPANESE, per, J. Chem. for Japan, Vol 80, 1959,  
pp 266-269.  
\*BISI 6253

Electrodeposition of Aluminium Powder, by K.  
Inoue.  
JAPANESE, per, J Met Fin Soc Japan, Vol 17, No 3,  
1966, pp 81-85.  
\*BISI 6144

Low-Temperature Brittle Fracture of Hot-Dipped  
Zinc Coatings, by H. Okuda and T. Okuda.  
JAPANESE, per, Kagaku to Kogyo, Vol 39, No 8,  
1965, pp 502-505.  
BISI 5375

Study of Electrophoretic Aluminium Coatings on  
Steel Plate, III. - Mechanism of Electrophoretic  
Deposition of Aluminium Powder, by T. Yamada.  
JAPANESE, per, Keikinsoku, Vol 15, May 1965,  
pp 55-59.  
\*BISI 6145

Studies on Martensite Transformation in  
Iron Nickel Alloys Report No. 3. Coexisting  
Ranges for Schiebung and Umklapp Transformation,  
by T. Honma.  
JAPANESE, per, Nippon Kinzoku, Vol. 21,  
1957, pp. 126-128.  
\*BISI 6096

Studies on Martensite Transformation in Iron-  
Nickel Alloys. Report No. 4. Propagation  
Process in Umklapp Transformation, by T. Honma.  
JAPANESE, per, Nippon Kinzoku, Vol. 21, 1957,  
pp. 263-267.  
\*BISI 6097

Scientific  
Materials (Contd)

Quantitative Spectrographic Determination of  
Traces of Boron in Plain-Carbon and Low-Alloy  
Steels, by T. Kawaguchi.  
JAPANESE, per, Nippon Kinzoku, Vol 28, No 11,  
1964, pp 759-763.  
BISI 5548

The Effect of Alloying elements on the Corrosion-  
Resistance of 20Cr-11Ni Type Heat-Resisting Steels  
Against Molten Lead Oxide, by K. Kusaka &  
K. Ikashima.  
JAPANESE, per, Nippon Kinzoku, Vol 30, No 3,  
1966, pp 226-230.  
\*BISI 6169

Strengthening of Steel by Hot Working, by  
I. Gokyu & K. Hashimoto.  
JAPANESE, per, Nippon Kinzoku, Vol 31, Apr 1967,  
pp 352-356.  
\*BISI 6211

The Origin of Ridging in 17% Stainless  
Steel Hot Strips, by N. Ohoshi.  
JAPANESE, per, Nippon Kinzoku, Vol 31,  
April 1967, pp. 519-525.  
\*BISI 6111

Grain Growth of Rimmed Mill Steel Sheet,  
Relationship Between the Distribution of  
Tiny Inclusions in Rimmed Mild Steel Sheet  
and the Recrystallized Grain Size, by  
H. Kubotera, et al.  
JAPANESE, per, Nippon Kinzoku, Vol. 31,  
April 1967, pp. 527-534.  
\*BISI 6112

On the Mechanism of Ridging Phenomenon in  
17% Chromium Stainless Steel, by H. Takechi,  
et al.  
JAPANESE, per, Nippon Kinzoku, Vol. 31,  
No. 6, 1967, pp. 717-723.  
\*BISI 6113

Study of Boron Impregnation of Steel Surfaces  
by  $B_2C-NaOCN$ , by A. Kura.  
JAPANESE, per, Nippon Kinzoku Gakkaishi, Vol 31,  
No 3, 1967, pp 296-300.  
HB 7347

Changes in Texture of Hot Rolled Strip of Low  
Carbon Steel, by H. Kubotera.  
JAPANESE, per, Nippon Kogan Techn. Rep., Vol 38,  
1966, pp 333-340.  
\*BISI 6190

Scientific  
Materials (Contd)

Proof Stress of H.T. Steel Members, by T. Kato, et al.  
JAPANESE, rpt, Proceedings of 12th Symposium on High Strength Steel and Its Function, 1966, Nov. 26, pp. 15-24.  
\*BISI 6114

Application and Use of a Neutron Moisture Gauge for Moisture Analysis of Blast Furnace Coke, by E. Egami.  
JAPANESE, per, Sumi Mat., Vol 19, Jan 1967, pp 23-27.  
BISI 5615

The Application of a Large Rimming Steel Ingot to the Production of Cold Rolled Deep Drawing Steel Sheet, by K. Sugazawa.  
JAPANESE, per, Sumitomo Mat., Vol 19, Apr 1967, pp 142-155.  
\*BISI 6220

Liquid Metal Flow in Ingot Mould During Solidification of Killed Steel, by H. Mori.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 3, 1966, pp 221-225.  
\*HB 7359

Effect of Pulsating Blast on the Reduction of Iron Ores, by Y. Yamada and T. Tsuda.  
JAPANESE, per, Tetsu to Hagane, Vol 52, No 9, 1966, pp 1370-1372.  
HB 7311

Trial Manufacture of Doubly Oriented Fe-Al-Si System, by O. Madono.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 10, 1966, pp 1633-1635.  
\*BISI 6146

Study of Directional Silicon Steel Sheet, II. - Electron-Microscopic Observation of Impurities which Influence Secondary Recrystallization of Silicon Steel Sheet, by T. Matsuoka.  
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 19, 1966, pp 1638-1640.  
\*BISI 6147

The Mechanism of Formation of Macroscopic Inclusions Produced by Air-Oxidation of Molten Steels, by K. Senda.  
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No. 1, 1967, pp. 11-27.  
\*BISI 6137

Scientific  
Materials (Contd)

Relationship Between Reducing Conditions and Physical Properties of Pre-Reduced Iron Ore Pellets, Part I of Basic Study of Pre-Reduced Iron-Ore Pellets, by K. Kuniti.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 3, 1967, pp 199-202.  
HB 7322

Experiments on the Solidification of Killed Steels, by H. Iijima & K. Inamoto.  
JAPANESE, per, Tetsu-to-Hagane, Vol 53, No 3, 1967, pp 227-230.  
\*HB 7360

Measurement of Tensile Properties of Steel with a High-Speed Impact Tension Testing Machine, by S. Sakui.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 4, 1966, pp 739-741.  
BISI 5130

Blowholes in Aluminum-Silicon Killed, Nitrogen-Alloyed Steel Ingots and Welding-up of Blowholes During Hot Rolling, by T. Saito.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 812-814.  
HB 7287

Wire Drawing Characteristics Under Critical Pressure, Part II of Drawing of Carbon Steel Wire with Forged Lubrication at Extreme Pressure, by T. Tsujimura.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 843-846.  
HB 7355

Photometric Determination of Zirconium in Stainless Steel with Arsenazo III, by O. Kamori.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 7, 1967, pp 857-859.  
HB 7335

The Growth of Inclusions During Deoxidation of Steels with Calcium Silicide, Part II of Investigation into the Behavior of Complex Deoxidants, by Y. Watanabe and T. Kusakawa.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1191-1193.  
HB 7369

Scientific  
Materials (Contd)

Elimination of Carbon from Liquid Metal by Means of Carbon Dioxide + Argon Gas Mixtures, by K. Sano.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1193-1195.  
HB 7370

Nonmetallic Inclusions in 20-Ton Steel Ingots Made in the Basic Electric Arc and Acid Open-Hearth Furnaces, Also in a 20-Ton Vacuum Cast Ingot. Part III of Study of Specifications of Heavy Forgings Made in Basic Arc and Acid Open-Hearth Furnaces, and an Investigation into Vacuum Casting, by K. Narita.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1199-1202.  
HB 7325

Room-Temperature Properties of Chromium Bearing Steels as Affected by Additions of Columbium and Molybdenum, by J. Muraki.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1273-1275.  
HB 7338

High-Temperature Properties of Chromium Bearing Steels as Affected by Additions of Columbium and Molybdenum, Part II of Effect of Columbium and Molybdenum Additions to Chromium-Type Bearing Steels, by J. Muraki.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1276-1278.  
HB 7342

Effect of Titanium, Copper and Tungsten Additions on the Properties of 10% Ni, 5% Mo, 9% Co Maraging Steel, by K. Kusaka.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1288-1291.  
HB 7323

Effect of Ausforming on Carbide Precipitation in Iron-Molybdenum-Carbon Alloys, by S. Watanabe.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1294-1296.  
HB 7324

The Nitrided Case of Rapid Nitriding Steel, by K. Kusaka.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1302-1305.  
HB 7258

Scientific  
Materials (Contd)

Rolling Fatigue Characteristics of Carburized or Carbonitrided 1% Cr Steel at Elevated Temperatures, by H. Kurabe and T. Arai.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1305-1308.  
HB 7367

Spectrographic Solution for the Determination of Acid-Soluble Aluminum in Steels, by S. Ogawa.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 11, 1967, pp 1359-1361.  
HB 7337

Equipment for Sampling and Analyzing Metallurgical Furnace Atmospheres, by M. Hayer, M. Mandl.  
POLISH, per, Hutnicke Listy, Vol 21, No 8, 1966, pp 532-538.  
HB 7000

An Investigation of the Kinetics of Sedimentary Deoxidation of Steel, by K. Mamro & J. Taborski.  
POLISH, per, Hutnik, Vol 34, Nos 7-8, 1967, pp 302-307.  
\*BISI 6255

Critical Consideration of Quantitative Micro-Methods for Determining Cleanliness of Steel, by J. Rys.  
POLISH, per, Hutnik, Vol 34, No 9, 1967, pp 391-395.  
\*HB 7373

The Effect of Angle Parameters During Rolling of Metal Powders on the Density of Strip, by W. Missol.  
POLISH, per, Prace Inst. Hutniczych, Vol 19, No 1, 1967, pp 57-59.  
BISI 5787

Trial Runs in a Pilot Basic Oxygen Furnace /at a Steelworks in Poland/, Part I, by J. Grzyb, L. Kurdzial.  
POLISH, per, Prace Rady Naukowo-Technicznej przy im. Lenina, No 14, 1964, pp 111-129.  
HB 6677

Polish-Soviet Cooperation in Metallurgy, by Juliusz Rybarski, Jerzy Stepian, 14 pp.  
POLISH, per, Problemy Projektowe Hutnictwa i Przemyslu Maszynowego, Vol 15, No 10, Oct 1967, pp 289-295.  
JPRS 44069

Scientific  
Materials (Contd)

The Effect of Sand Grain Size of the Casting Properties of Synthetic Sand Mixes, by J. Szozeniawski.  
POLISH, per, Prz. Odlew., Vol 17, June 1967, pp 177-183.  
\*BISI 6249

Segregation of Elements in a Killed Steel Ingot, by W. Hansel & L. Osika.  
POLISH, per, Z.N.A.G.H. Met. Odlew., Vol 67, No 9, 1963, pp 37-56.  
\*BISI 6228

Operation of Electric Reduction Furnaces, by Max Fernandes Alvim Machado.  
PORTUGUESE, per, Bol Assoc Brasil Metals, Vol 28, No 84, Sep 1964, pp 451-467.  
\*BISI 6150

Continuous Casting of Steels for Tinplate, by C.H. M. Braga.  
PORTUGUESE, per, Met ABM (Sao Paulo), Vol 22, Oct 1966, pp 779-783.  
BISI 5426

Classification of Some Brazilian Iron Ores by the Reduction Test, by C. D. Brosch & H. P. Rizzo.  
PORTUGUESE, per, Met. ABM, Vol 23, Sept 1967, pp 687-692.  
\*BISI 6201

Pelletization of Manganese Ore, by C. D. Brosch.  
PORTUGUESE, per, Met. ABM, Vol 23, Sept 1967, pp 695-697.  
\*BISI 6204

Reduction of Iron Ores in Shaft Furnaces by Regenerated Circulating Gas, by I. Tripsa & O. Hatarascu.  
RUMANIAN, per, Metalurgia, Vol 19, No 3, 1967, pp 130-134.  
\*HB 7353

Increased Production of High-Grade Steels, by Dragomir Moisin, 5 pp.  
RUMANIAN, per, Munca, Bucharest, 24 Dec 67, pp. 1,3.  
JPRS 44,244

Scientific  
Materials (Contd)

Investigations Into the Modification of Pig Iron by Treatment with Methane, by L. Sofroni, E. Nicoloiu.  
RUMANIAN, per, Rev. Roumaine Sci. Techn., Vol 9, No 2, 1964, pp 233-244.  
\*BISI 6171

Steelmaking in the Electric Furnace with Total Substitution of the Scrap by Krupp-Renn Modules, by G. Coll Gomex-Trevijano.  
SPANISH, per, Inst. Hierro Acero, Vol 16, Jul-Sept 1963, pp 276-283.  
BISI 5630

The Packing Material Research and Testing Laboratory, 9 pp.  
SWEDISH, per, Emballageprovningslaboratoriet (Kort Presentation av Organization och Verksamhet), No 2, 1964.  
ACSI J-4121  
ID 2204000868

Scab Preventing Liquids for Application to the Surface of Green Sand Moulds, by R. Sillen.  
SWEDISH, per, Gjuteriet, Vol 57, June 1967, pp 81-83.  
\*BISI 6209

Direct Reduction of Iron Ore by the Stora Kopparbergs Method, by A. Josefsson.  
SWEDISH, per, Jernkon. Ann., Vol 148, No 3, 1964, pp 128-139.  
BISI 5353

The Influence of Different Factors on the Coefficient of Heat Transfer in Steel Heating Furnaces, by G. Wallquist.  
SWEDISH, per, Jernkon. Ann., Vol 149, No 5, 1965, pp 221-256.  
\*BISI 6224

Changes in Steels for Reactor Pressure Vessel After Neutron Irradiation, by H. P. Myers.  
SWEDISH, per, Jernkon. Ann., Vol 151, No 3, 1967, pp 197-215.  
\*BISI 6191

KAM 40, KAM 60 and KAM 90. (Reinforcing Steels.), by H. Granholm.  
SWEDISH, per, Trans Chalmers Univ of Technology, 1959, pp 2-39.  
BISI 5066



Scientific  
Mathematical Sciences

Studies in Mathematical Geology, by  
Andrew B. Vistelius. 294 pp.  
RUSSIAN, bk, Sept 1967.  
Consultants Bureau

Collected Works of Academician A. M. Lyapunov,  
Volume I, by A. M. Lyapunov, 451 pp.  
RUSSIAN, bk, Academician A. M. Lyapunov, Sobraniye  
Sochineniy. (I), Vol 1, 1956, pp 1-447.  
P100035368-V  
FTD-MT-64-209

Instruments for Determining Correlation  
Functions, by K. V. Tomingas & M.S. Alabyan,  
8 pp.  
RUSSIAN, per, AN SSSR. Institut Avtomatiki i  
Telemekhaniki. Tekhnicheskaya Kibernetika,  
1965, pp 56-60.  
P100017868  
FTD-HT-66-598

A Minimal Circuit Made up of Closed Contacts for  
a Boolean Function of n Arguments, by R. Ye.  
Krichovski.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Institut Matematiki. Diskretnyy Analiz, No 5,  
1965, pp 89-92.  
\*FTD-HT-23-136-68

Minsk-222 Universal Computer System, by E. V.  
Yevreinov, G. P. Lopato.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Institut Matematiki. Vychislitel'nyye Sistemy, No 23,  
1966, pp 13-20.  
\*FTD-HT-23-169-68

On Question of Realization of Variational  
Methods in AVM (Analog Computers), As Applied  
to Solution of Integral Equations, by A. F.  
Verlan', 6 pp.  
RUSSIAN, per, AN UKRSSR. Institut  
Kibernetiki. Kibernetika i Vychislitel'naya  
Tekhnika, 1964, pp 3-7.  
P100028668-V  
FTD-MT-65-551

Elements of Applied Mathematics, by Ya. B.  
Zel'dovich, A. D. Myshkis.  
RUSSIAN, bk, Elementy Prikladnoi Matematiki,  
Second edition, revised and enlarged, 1967.  
PLENUM PRESS

Scientific  
Mathematical Sciences (Contd)

On One Representation of the Probability Integral  
in Terms of an Elementary Function, by  
A. N. Reznikov.  
RUSSIAN, per, Inzh.-Fiz. Zh., Vol 13, No 3,  
1967, pp 379-381.  
Dept of Navy/APL/JHU T-2101

Computers with Core-Diode Elements, by  
Yu. A. Makhmudov, 11 pp.  
RUSSIAN, per, AN AZERBSSR. Izvestiya.  
Seriya Fiziko-Tekhnicheskikh i Matematicheskikh  
Nauk, No 6, 1964, pp 27-35.  
P100015468  
FTD-HT-67-48

Numerical Solution of a System of Two-Dimensional  
Unsteady Navier-Stokes Equations for a Compressible  
Gas in a Closed Region, by V. I. Polezhayev.  
RUSSIAN, per, AN SSSR. Izvestiya. Mekhanika Zhid-  
kosti i Gaza, No 2, 1967, pp 103-111.  
\*FTD-HT-23-104-68

Numerical Calculation of a Supersonic Flow Past  
Ducted Bodies at Angle of Attack, by O. N. Katskova  
& P. I. Chushkin.  
RUSSIAN, per, AN SSSR. Izv., Mekh. Zhid. i Gaza,  
No 3, 1967, pp 124-130.  
\*Dept of Navy/APL/JHU J-1117

A Method for System Reliability Analysis,  
by B. P. Zelentsov, 7 pp.  
RUSSIAN, per, AN SSSR. Sibirskoye Otdeleniye.  
Izvestiya. Seriya Tekhnicheskikh Nauk, No 2,  
1965, pp 44-48.  
P100014168  
FTD-HT-23-501-67

Principles of Construction of Flat Outlines,  
by I. I. Kotov, 6 pp.  
RUSSIAN, per, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 95-98.  
P100029368-V  
FTD-MT-65-72

Determination of the Distribution Parameters  
of Linear Dimensions When Treating a Batch of  
Components, by A. 3. Shevelev, 8 pp.  
RUSSIAN, per, Izvestiya Vysshikh  
Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika,  
No 1, 1965, pp 99-106.  
P100029868-V  
FTD-MT-65-72

Scientific  
Mathematical Sciences (Contd)

Resolvent of a Self-Adjoint Expansion of an Elliptic Operator, by V. N. Pivnenko.  
RUSSIAN, per, VUZ, Izv., Mat., No 9, 1967, pp 69-74.  
\*Dept of Navy/APL/JHU J-1123

Theory of Representation of Symmetric and Isometric Operators in Hilbert Spaces, by V. I. Polyakov.  
RUSSIAN, per, VUZ, Izv., Mat., No 9, 1967, pp 86-92.  
\*Dept of Navy/APL/JHU J-1124

Approximate Determination of the Eigenvalues of Certain Operators Which are Meromorphically Dependent on a Parameter, by L. M. Belyakov.  
RUSSIAN, per, VUZ, Izv., Mat., No 11, 1967, pp 7-10.  
\*Dept of Navy/APL/JHU J-1139

Cybernetics in the Navy, by A. L. Lifshits, 225 pp.  
RUSSIAN, bk, Kibernetika v Voenno-Morskoy Flote, 1964, pp 1-258.  
P100029068-V  
FTD-MT-65-80

Statistical Probability Modelling of Random Processes, by A. S. Zhernenko.  
RUSSIAN, per, Morskoy Sbornik, No 11, 1965, pp 32-37.  
\*FTD-MT-23-101-68

Certain Questions of Asymptotic Solution of One Operator Differential Equation, by I. I. Kovtun, 8 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 33-39.  
P100028968-V  
FTD-MT-64-322

Sufficient Conditions of Convergence of Method of Yu. D. Sokolov during Approximate Solution of Nonlinear Integral Equations of Type of Hammerstein, by N. S. Kurpel', 8 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 47-53.  
P100028968-V  
FTD-MT-64-322

Scientific  
Mathematical Sciences (Contd)

On the Cauchy Problem for Equations of Higher Order with Multiple Characteristics, by I. F. Kushnirchuk, 6 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 54-59.  
P100028968-V  
FTD-MT-64-322

On Random Processes in Simple Linear Delay Systems, by M. N. Maydanyuk, V. P. Rubanik, 5 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 60-63.  
P100028968-V  
FTD-MT-64-322

On Adherence of Solutions of a Linear Uniform Second Order Delay Differential Equation, by S. B. Norkin, 11 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 82-89.  
P100028968-V  
FTD-MT-64-322

Substantiation of Principle of Averaging for Differential Equations with Discontinuous Right Side, by A. M. Samoylenko, 8 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 90-95.  
P100028968-V  
FTD-MT-64-322

Asymptotic Behavior of Negative Part of Spectrum of One-Dimensional Differential Operators, by B. Ya. Skachek, 18 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 96-109.  
P100028968-V  
FTD-MT-64-322

Scientific  
Mathematical Sciences (Contd)

On the Solution of a Type of Nonlinear Differential Equation, by E. F. Fayzibayev, 3 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 126-128.  
P100028968-V  
FTD-MT-64-322

On the Existence and Properties of Integral Manifold for System of Nonlinear Delay Differential Equations with Variable Coefficient, by V. I. Podchuk, 14 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 129-140.  
P100028968-V  
FTD-MT-64-322

On Nonlinear Oscillations of a Plate, by I. F. Shulezhko, 15 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKRSSR. Institut Matematiki, 1963, pp 141-154.  
P100028968-V  
FTD-MT-64-322

On Two Representations of the Equations of the Theory of Shells, by V. Z. Vlasov.  
RUSSIAN, per, Prikladnaya Matematika i Mekhanika, Vol 11, No 5, 1947, pp 521-526.  
\*FTD-MT-23-100-68

Remarks on Using Approximation Methods of Solving Differential Equations, by E. G. Kronberg.  
RUSSIAN, per, Sb Vopr Dinamiki i Prochnosti, Vol 12, 1966, pp 28-38.  
\*FTD-MT-23-138-68

On Type of Integral Equations in Banach Spaces, by V. M. Musaev.  
RUSSIAN, per, Sibirsk. Mat. Zh., Vol 8, No 3, 1967, pp 621-628.  
\*Dept of Navy/APL/JHU J-1116

One-Sided Estimations of Solution of Non-Linear Differential Equations in Banach Spaces, by R. M. Sultanov.  
RUSSIAN, per, Sibirskii Mat. Zh., Vol 8, No 4, 1967, pp 859-864.  
\*Dept of Navy/APL/JHU J-1121

Scientific  
Mathematical Sciences (Contd)

On the Completeness of a System of Functions in HP, by B. M. Bichkov & V. M. Grober.  
RUSSIAN, per, Sibirskii Mat. Zh., Vol 8, No 4, 1967, pp 942-946.  
\*Dept of Navy/APL/JHU J-1122

The Summation of Orthogonal Series by Linear Methods, by A. V. Efimov.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 2, 1967, pp 119-121.  
Dept of Navy/APL/JHU T-2103

Quasilinear Equations in Linear Topological Spaces, by V. I. Averbukh.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 3, 1967, pp 233-234.  
Dept of Navy/APL/JHU T-2107

Infinite-Dimensional Elliptic Operators and Related Parabolic Equations, by Yu. L. Daletskiy.  
RUSSIAN, per, Uspekhi Mat. Nauk, Vol 22, No 4, 1967, pp 3-54.  
\*Dept of Navy/APL/JHU J-1126

About Possible Extension of the Idea of Solution for Linear and Quasi-Linear Elliptic Equations of the Second Order, by O. A. Ladyzhenskaya, N. N. Ural'tseva, 19 pp.  
RUSSIAN, per, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 10-25.  
P100028868-V  
FTD-MT-64-145

Generators in Ergodic Theory, by V. A. Rokhlin, 8 pp.  
RUSSIAN, per, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 26-32.  
P100028868-V  
FTD-MT-64-145

Stability of Solution of Minkowski Problem, by Yu. A. Volkov, 13 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 33-43.  
P100028868-V  
FTD-MT-64-145

Scientific  
Mathematical Sciences (Contd)

About Representation of a Function of Two Variables by the Difference of Convex Functions, by V. A. Zalgaller, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 44-45.  
P100028868-V  
FTD-MT-64-145

The Question about Stability of Solutions of Equations of the Elliptic Type, by Ye. P. Sen'kin, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 46-47.  
P100028868-V  
FTD-MT-64-145

On the Existence of Closed Convex Polyhedrons with Given Curvatures of Vertices in n-Dimensional Euclidean and Lobachevskian Spaces, by A. A. Zil'berberg, 7 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 48-52.  
P100028868-V  
FTD-MT-64-145

About Determination of a Surface by Supporting Function, by Yu. G. Dutkevich, 8 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 53-58.  
P100028868-V  
FTD-MT-64-145

On Double Sums, Connected with the Zeros of the Dirichlet L-Series, by A. I. Vinogradov, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 59-63.  
P100028868-V  
FTD-MT-64-145

About the Maximum Principle for One Class of Operators in Banach Space, by V. G. Maz'ya, 7 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 64-69.  
P100028868-V  
FTD-MT-64-145

Scientific  
Mathematical Sciences (Contd)

Formulas of Summation, by V. V. Pototskiy, 10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 70-78.  
P100028868-V  
FTD-MT-64-145

Necessary and Sufficient Criterion of Compactness of Insertion, by A. G. Ramm, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 150-151.  
P100028868-V  
FTD-MT-64-145

Higher Mathematics for Beginners and its Application to Physics, by Ya. B. Zel'dovich.  
RUSSIAN, bk, Vysshaya Matematika dlya Nachinayushchik i ee Prilozheniya i Fizike, Third ed. enlarged, 1965.  
PLENUM PRESS

Method of Adding Binary Numbers, by R. B. Mnatsakanov, G. G. Ladariya, 5 pp.  
RUSSIAN, Patent No 176724 (Appl No 880153/26-24, Feb 6, 1964)  
P100013368  
FTD-HT-23-709-67

Methods of Finding Pulse Compression Signals of Noncyclic Binary Codes, by Liu Ch'en-hua, 16 pp.  
CHINESE, per, Chung-kuo K'o-hsueh Chi-shu Ta-hsueh Hsueh-pao, Vol 1, No 1, Feb 1965, pp 123-133.  
JPRS 44088

On a Very General Integral Equation of Gravimetry, by J. J. Levallois.  
FRENCH, rpt, Bulletin Geodesique. New Series No 50, 1958, pp 36-49.  
\*AGIC TC-1390

Communication on the Curvature of the Vertical, by F. Kobold, E. Hmsiker.  
FRENCH, rpt, Bulletin Geodesique. New Series No 65, 1962, pp 265-267.  
\*AGIC TC-1388

Synthesis of the Analytical Results on Optimal Transfers Between Keplerian Orbits, by Christian Marchal.  
FRENCH, rpt, ONERA T.P. 515, 1967, 35 pp.  
\*NASA TT F-11,590

Scientific  
Mathematical Sciences (Contd)

Linear Solutions of Molodensky's Problem, by  
H. Moritz.  
GERMAN, rpt, Report to the IAG Conference "The  
Normal Spheroid and the Figure of the Earth",  
March 1967, 50 pp.  
ACIC TC-1298

Practical Computing Formulas for Three-Dimensional  
Geodesy, by R. A. Hirvonen.  
GERMAN, per, Zeitschrift für Vermessungswesen,  
Vol 89, No 5, May 1964, pp 145-151.  
\*ACIC TC-1387

Redundant Representations and the  
Arithmetic Operation Speed of Digital  
Computers, by J. Bankowski, 22 pp.  
POLISH, per, Archiwum Automatyki i  
Telemechaniki, Vol 10, No 3, 1965,  
pp 375-390.  
P100015968  
FTD-HT-67-35

The Selection of a Corrective Element in  
Multidimensional Linear Systems,  
by Z. Podgoda, 15 pp.  
POLISH, per, Dobor Elementu Korckcyjnego w  
Linowych Ukladach Wielowymiarowych, Vol 10,  
No 3, 1965, pp 341-352.  
P100015968  
FTD-HT-67-35

Resolution of a Great System of Standard Equations  
through the Application of Ideas of Francis Prane-  
vich and Prof. Bolts, by Esteban Horvat.  
SPANISH, per, Instituto Panamericano de Geografia  
e Historia, Publ No 135, 1954.  
\*ACSI J-4376  
ID 2204006768

Mechanical, Industrial, Civil & Marine  
Engineering

Electromagnetic Depth Sounding, by L. L. Vanyan  
312 pp.  
RUSSIAN, bk, Aug 1967  
Consultants Bureau

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

The Monofrequency Method in the Dynamic Analysis  
of Structures, by Yu. A. Mitropol'skiy,  
B. I. Moseykov. 102 pp.  
RUSSIAN, bk, Sep 1967.  
Consultants Bureau

Analytical Mechanics, Stability of Motion,  
Celestial Ballistics. Proceedings of the Second  
All-Union Conference on Theoretical and Applied  
Mechanics.  
RUSSIAN, bk, Analiticheskaya mekhanika,  
ustoychivost' dvizheniya, nebesnaya ballistika.  
Trudy II Vsesoyuznyi s' yezd' po teoreticheskoy  
i prikladnoy mekhanike, Moscow, Izdatel'stvo  
"Nauka", 1965, 211 pp.  
\*CSFTI TT 68-50305

On the Equations for the Errors of an Inertial  
Navigational System Which Determines the Arbitrary  
Curvilinear Coordination of a Moving Object;  
from Automation Express, by V. D. Andreyev.  
RUSSIAN, per, AN SSSR. Izvestiya Mekhanika, No  
4, 1965, pp 108-116.  
\*FTD-HT-23-98-68

Machine for Rolling Circular Saws, by  
Yu. M. Stakhiev.  
RUSSIAN, per, Dereboobrabatuyayushchaya  
Promyshlennost, Moskva, Vol 14, No 2, 1965,  
p 28.  
\*CSFTI TT 68-50375/7

Central Asia-Central Russia Transcontinental  
Gas Pipeline, by K.K. Smirnov, 5 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 5-6.  
JPRS 44,412

Moscow Order of Lenin Gas Pipeline Administra-  
tion, by A. B. Sedykh, 6 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 7-9.  
JPRS 44,412

Kiev Gas Pipeline Administration, by V.S.  
Chernovol, 5 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 10-11.  
JPRS 44,412

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Bukhara-Urals Natural Gas Pipeline Administration, by V.S. Zotov, 7 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 12-14.  
JPRS 44,412

Minsk Natural Gas Pipeline Administration, by  
G.M. Dzagnidze and A.V. Zheleznyakov, 6 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 15-17.  
JPRS 44,412

Leningrad Natural Gas Pipeline Administration,  
by S.F. Barmin, and I.M. Zhigalova, 7 pp.  
RUSSIAN, journal, Gazovaya Promyshlennost',  
Moscow, No. 11, 1967, pp. 17-20.  
JPRS 44,412

Power and Irrigation Construction in the  
Balkhashiliyskiy Basin in Kazakhstan, by  
B. Amosov and R. Sedykh, 6 pp.  
RUSSIAN, newspaper, Kazakhstanskaya Pravda,  
Alma-Ata, 20 Jan 68, pp. 2-3.  
JPRS 44,374

Large Depressions in Slanted Rotation Shells with  
a Zero Bend Rigidity and Affected by Steady Inside  
Pressure, by A. V. Sachenkov.  
RUSSIAN, per, Kazan. Universitet. Issledovaniya  
po Teorii Plastin i Obolochek, No 2, 1964, pp 71-  
78.  
\*FTD-HT-23001-68

Survey of Design Specifications of Missile Ships,  
by N. I. Belavin, 6 pp.  
RUSSIAN, bk, Korabli-Raketonostey, 1967, pp 2, 3-4,  
269, 270, 271-272.  
JPRS 44083

Construction of Auto Plant in Tol'yatti,  
by Val. Rushkis, 6 pp.  
RUSSIAN, weekly, Literaturnaya Gazeta,  
No. 52, Moscow, 27 Dec 67, p. 11.  
JPRS 44,264

Theoretical Analysis of the Process of Readjust-  
ment of the Operating Regimes of Stages in a  
Multistage Axial Compressor, by V. A. Stefanovskiy.  
RUSSIAN, bk, Lopatochnyye Mashini i Struynnye  
Apparaty, 1967, pp 147-170.  
\*NASA TT F-11,584

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Effect of Water Flow Rate on Cavitation  
Erosion, by S. P. Kozyrev, 9 pp.  
RUSSIAN, per, Mashinovedeniye, No 1, 1966,  
pp 91-95.  
P100015768  
FTD-HT-23-581-67

Mechanics of Low-Thrust Spaceflight, by  
G. L. Grodzovski.  
RUSSIAN, bk, Mekhanika kosmicheskogo poleta s  
maloy tyagoy. Moscow, Izdatel'stvo "Nauka",  
1966, 673 $\frac{1}{2}$  pp.  
\*CSFTI TT 68-50301

Automation of Construction Operations, by V. A.  
Ogiyevich, A. M. Ginzburg, 5 pp.  
RUSSIAN, per, Mekhanizatsiya Stroitel'stva, No  
12, Dec 1967, pp 2-4.  
JPRS 44077

Mean and Extreme Pressure Values, by O. B.  
Mertsalova, M. V. Sokolova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut  
Aeroklimatologii, Trudy No 24, 1963, pp 54-58.  
\*FTD-MT-24-45-68

Computers and Calculation of Constructions,  
by A. V. Gemmerling, 12 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal,  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooruzheniy"  
No 3, 1963, pp 1-4.  
P100015668  
FTD-MT-66-24

Stereophotogrammetric Method of Measurement  
of Deformations of Three-Dimensional  
Structures, by P. I. Polyakov, M. Z.  
Taranovskaya, 10 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal.  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooruzh-  
eniy", No 3, 1963, pp 7-11.  
P100015668  
FTD-MT-66-24

Calculation of Rods from Plastics on Buck-  
ling, by V. P. Kotsegubov, 9 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskiy Zhurnal.  
Akademii Stroitel'stva i Arkhitektury SSSR.  
"Stroitel'naya Mekhanika i Raschet Sooru-  
zheniy", No 3, 1963, pp 15-19.  
P100015668  
FTD-MT-66-24

Pulsed Light Source with Radiation Similar to that of a Complete Black Body at a Temperature of about 40000 K, by N. N. Ogurtsova, I. V. Podmoshenskiy.  
RUSSIAN, per, Optiko-Mekhanicheskaya Promyshlennost', No 1, 1960, pp 1-5.  
\*FTD-MT-24-40-68

Strength Calculation of Machine Parts; a Manual for Machine Designers, by I. A. Birger.  
RUSSIAN, bk, Raschet na Prochnost' Detaley Mashin; Spravochnoye Posobiye, 2d Ed., Rev and Enl., Mashinostroyeniye, 1966, 616 pp.  
\*FTD-HT-23-80-68C

Scattering, Reaction and Decay in Nonrelativistic Quantum Mechanics, by A. I. Baz'.  
RUSSIAN, bk, Rasseyaniye reaktsii i raspady v nerelativistskoi kvantovoi mekhanike, Moscow, Izdatel'stvo "Nauka", 1966, 337 pp.  
\*CSFTI TT 68-50309

Conference on the Machine and Tractor Pool Held in Krasnodar, 18 pp.  
RUSSIAN, per, Sel'skiy Mekhanizator, No. 12, Moscow, Dec 67, pp. 6-9.  
JPRS 44,338

Improvements to be Made in Rural Construction, by V. Gushchin, 8 pp.  
RUSSIAN, journal, Sel'skoye Stroitel'stvo, Moscow, No. 12, Dec 67, pp. 1-2.  
JPRS 44,216

The Establishment and Development of Construction, Road, and Communal Machine-Building in the USSR, 13 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 1-8.  
JPRS 44081

Stages in the Development of Single-Bucket Excavators, by A. I. Astakhov, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 14-17.  
JPRS 44081

Development of Production of Multibucket Excavators, by Z. Ye. Garbusov, V. P. Uspenskiy, 6 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 18-20.  
JPRS 44081

Construction Cranes in the USSR, by A. A. Vaynson, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 21-23.  
JPRS 44081

Self-Propelled Boom Cranes in the USSR, by S. M. Borisov, 7 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 24-26.  
JPRS 44081

Road Machine Building in the 50 Years of Soviet Power, by A. A. Vasil'yev, 8 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 26-32.  
JPRS 44081

Development of Power Tools and Machines for Finishing Operations in Construction, by V. A. Yeletskiy, 10 pp.  
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mashiny, No 10, Oct 1967, pp 32-37.  
JPRS 44081

Ways of Improving the Cavitation Characteristics of Marine Condensate Pumps, by N.S. Yalovoy, 11 pp.  
RUSSIAN, per, Sudostroyeniye, No. 7, July 67, Moscow, pp. 30-34.  
JPRS 44,367

Merchant and Fishing Shipbuilding in Jubilee Year, by Ye.G.Frid and M.N. Belpayev, 10 pp.  
RUSSIAN, per, Sudostroyeniye, Leningrad, No. 11, 1967, pp. 13-17.  
JPRS 44,199

An Automatic Transverse Stabilization System for the Scientific-Research Ship  Akademik Kurchatov, by E. A. Yanohevskiy, V. A. Kaverin, 8 pp.  
RUSSIAN, per, Sudostroyeniye, No 9, Sep 1967, pp 31-34.  
JPRS 44079

The Use of Color Screen for Quantitative Investigations of Schlieren by the Tepler Optical Method, by M. B. Apashev and V. B. Mikhaylenko.  
RUSSIAN, bk, Theory, Construction, Design and Testing of Internal Combustion Engines, Issue VI, Proceedings of the Engine Institute of the Academy of Sciences of the USSR, Academy of Sciences Publishing House, Moscow, 1962.  
Dept of Navy NTC 2514

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

New Standard Designs for Large-Capacity Water-Purification Plants, by V.I. Filippov, 10 pp.  
RUSSIAN, per, Vodosnabzheniye i Sanitarnaya Tekhnika, No. 5, Moscow, 1964.  
JPRS 44,309

The Action of Wind Waves on Petroleum Industry Hydraulic Engineering Installations of Continuous Design, by A. Ibragimov, 165 pp.  
RUSSIAN, bk, Vozdeystviye vetrovykh voyn na neftepromyslovyye gidrososoruzheniya skvoznoy konstruktsii, 1966. P500026468-V  
Dept of Navy/NIC Trans No 2489

The Development of Antifriction Bearing Designs, by P. N. Sidorov.  
RUSSIAN, per, Vsesoyuznyy Nauchno-Issledovatel'skiy i Konstruktorsko-Tekhnologicheskii Institut Podshipnikovoy Promyshlennosti. Trudy, Issue 3(35), 1963, pp 31-39.  
\*FTD-HT-23-97-68

Planning Solutions for Apartment Houses Made of Room-Blocks, by D. Meyerson, and M. Ioffe, 10 pp.  
RUSSIAN, journal, Zhishchnoye Stroitel'stvo, Moscow, No. 12, 1967, pp. 6-9.  
JPRS 44,263

Dynamics of Rotors on Gas Bearings, by A. Tondl.  
CZECH, per, Stroitel'stvi, Vol 16, No 7, 1966, pp 486-490.  
\*FTD-HT-23-62-68

Railroad Designer, by Rudolf Hudec, Petr Hodan.  
CZECH, per, Zeleznicar, 29 Apr 1967, pp 2-3.  
DIA LN 276-68

Straightening of Rails in a Modern Installation at the Micheville Plant of Sidelor, by H. Charbonnier.  
FRENCH, per, CDS Circ., No. 9, 1967, pp. 2055-2062.  
\*BISI 6123

Construction of the New Dam at Kossou, 7 pp.  
FRENCH, newspaper, Fraternite, Abidjan, Vol 10, No. 436, 19 Jan 68, pp. 3,6,8.  
JPRS 44,382

Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Geometry and Kinematics of the Roll Gap in Straightening of Round Bars by a Two-Roll Straightening Machine, by O. Pawelski and R. Fangmeier.  
GERMAN, per, Arch. Eisenh., Vol. 38, Sept 1967, pp. 711-723.  
\*BISI 6118

Some New Accelerator Problems, II, by Chr. Keck.  
GERMAN, per, Kernenergie, Vol 9, No 7, 1966, pp 217-224.  
\*FTD-HT-23-162-68

Optimum Plant Size in the Steel Industry, by K.W. Putsch and H. Timmke.  
GERMAN, per, Kleppzig Fachber., Vol. 75, April, 1967, pp. 729-732.  
\*BISI 6108

The Full-Track Assembly (Development and Status).  
GERMAN, per, Soldat Und Technik, Vol 10, No 8, 1967, pp 421-427.  
ACSI J-3800  
ID 2204055967

The Full-Track Assembly (Independent Suspension).  
GERMAN, per, Soldat Und Technik, Vol 10, No 9, 1967, pp 468-474.  
ACSI J-3800  
ID 2204055967

Operational Experience With Oxygen Steelworks Fume Arrestment Equipment, by G. Mainhausen.  
GERMAN, per, Stahl Eisen, Vol. 87, 1967, pp. 1304-1309.  
\*BISI 6105

Control of Sinter Mix Humidity Using a Neutron Surface Probe, by M. Erpelding, et al.  
GERMAN, per, Stahl Eisen, Vol. 87, Nov. 16, 1967, pp. 1417-1422.  
\*BISI 6126

Atomic Ships, by M. Otto, 5 pp.  
GERMAN, per, Volksarmee, No. 20, 1966, p. 8.  
P100009168  
FTD-HT-23-779-67

Non-Linear Bending Theory of Sandwich Sheets, Part II, by V. Dundrova.  
HUNGARIAN, per, Acta Technica Academiae Scientiarum Hungaricae, Vol 55, No 1-2, 1966.  
\*ACSI J-4411  
ID 2204007468



Scientific  
Mechanical, Industrial, Civil & Marine  
Engineering (Contd)

Non-Linear Bending Theory of Sandwich Sheets,  
Part III, by V. Dundrova.  
HUNGARIAN, per, Acta Technica Academiae Scient-  
iarum Hungaricae, Vol 57, No 1-2, 1967, pp 19-32.  
\*ACSI J-4412  
ID 2204007568

A Setting System With an On-Line Computer  
For a Tube Manufacturing Plant Employing  
Pilger Rolling Mills and Reducing and  
Stretching Mill, by R. Raimondi, et al.  
ITALIAN, per, Boll. Tech. Finisider,  
Dec 65, pp. 909-917.  
\*BISI 6131

Diesel - Hydraulic Fork Lift Trucks. 40 pp.  
ITALIAN, rpt, Diesel - Hydraulic Fork Lift Trucks.  
ACSI J-3745  
ID 2850028167

Progress in the Ship Painting Field.  
POLISH, per, Budowictwo Okretow, No 11, 1965.  
\*Dept of Navy NIC

Use of Construction Elements Discussed, 11 pp.  
POLISH, per, Fundamenty, No 47, 19 Nov 1967,  
pp 6,7, 11.  
JPRS 44092

Modernization of State Steam Locomotives, by  
Jozef Fijalkowski, 10 pp.  
POLISH, per, Przeglad Kolejowy Mechaniczny,  
No. 11, Warsaw, Nov 67, pp. 317-321.  
JPRS 44,232

Some Scientific Research Problems in the Machine-  
Building Industry (A Discussion-Type Article),  
by S. Lewandowski, 7 pp.  
POLISH, per, Przeglad Mechaniczny, No 3, pp 66-  
69.  
ACSI J-3549  
ID 2204049367

Mobile House Trailer Camp for Army Engineer  
Units, by Dragutin Milunovic, 12 pp.  
SERBO-CROATIAN, per, Vojnotehnicki Glasnik,  
No. 12, Belgrade, Dec 67, pp. 1009-1014.  
JPRS 44,275

Trends in the Development of the Blast Furnace  
Process, by S. Ekatorp.  
SWEDISH, per, Jernkon. Ann., Vol. 47, No. 9,  
1963, pp. 757-843.  
\*BISI 6115

Scientific  
Methods & Equipment

Terminology of Aerial Photography,  
by A. M. Terpigorev.  
RUSSIAN, per, Committee on Technical Terminology,  
No 29, Academy of Sciences of the USSR, Publishing  
House of the Academy of Sciences of the USSR.  
Dept of Navy NIC 2512

An Effective Method of Increasing the Durability  
of Wood-Cutting Saws, by L. F. Melekhin.  
RUSSIAN, per, Dereboobratyvvayushchaya  
Promyshlennost, Moskva, Vol 12, No 12, 1963,  
pp 5-8.  
\*CSFTI TT 68-50375/3

The Planer Saw Designed by A. P. Den'kac, by  
Yu. M. Stakhiev & Yu. P. Varlamov.  
RUSSIAN, per, Dereboobratyvvayushchaya  
Promyshlennost, Moskva, Vol 13, No 12, 1964,  
pp 28-29.  
\*CSFTI TT 68-50375/6

Bandsaw Strength Under the Influence of Feed  
Forces, by A. E. Feoktistov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 3, No 3, 1960, pp 95-106.  
\*CSFTI TT 68-50397/3

A Test Rig for Investigating the Process of  
Frame-Sawing, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 6, No 3, 1963, pp 107-113.  
\*CSFTI TT 68-50397/12

The Wear of Swage-Set and Spring-Set Teeth of  
Frame Saws, by E. M. Borovikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 4, No 5, 1961, pp 113-116.  
\*CSFTI TT 68-50397/7

Profiling Saw Teeth for Cross-Cutting, by  
V. I. Mikulinskii.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 3, No 4, 1960, pp 116-119.  
\*CSFTI TT 68-50397/5

Measuring Stresses in the Blade of a Bandsaw  
by Wire Strain-Gauges, by I. I. Trubnikov.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk),  
Vol 6, No 3, 1963, pp 119-121.  
\*CSFTI TT 68-50397/13

Scientific  
Methods & Equipment (Contd)

Deformations and Stresses Arising in an Idling Bandsaw, by E. D. Dobrynin.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 5, No 5, 1962, pp 123-127.  
\*CSFTI TT 68-50397/8

The Roller-Tensioning of Frame Saws, by Yu. I. Yurev.  
RUSSIAN, per, Lesnoi Zhurnal (Arkhangel'sk), Vol 2, No 4, 1959, pp 136-143.  
\*CSFTI TT 68-50397/2

Physico - Chemical and Histological Characteristics of Meat Frozen by an Accelerated Method, by S. Il'chenko, 6 pp.  
RUSSIAN, per, Myasnaya Industriya, No 7, 1967, pp 27-30.  
ACSI J-3718  
ID 2204052367

Methods for Computing a Tentative Standard Atmosphere, by Z. I. Gavrilova.  
RUSSIAN, per, Nauchno-Issledovatel'skiy Institut Aeroklimatologii. Trudy, No 24, 1963, pp 7-17.  
\*FTD-HT-23-99-68

An Investigation of Stresses in the Key End of a Compressor Blade, by V. B. Gorlov.  
RUSSIAN, rpt, Polyarizatsionno-Opticheskiy Metod Issledovaniya Napryazheniy, 1966, pp 330-334.  
\*FTD-HT-23-152-68

Pyrometer for Measuring Temperatures Below 800°, by A. V. Kogan, M. L. Bantsur.  
RUSSIAN, per, Poroshkovaya Metallurgiya Akad Nauk Ukr SSR, Vol 6, No 7, 1966, pp 102-106.  
\*FTD-HT-23-113-68

The Use of Aerosols to Control Forest Pests, by I. V. Tropin.  
RUSSIAN, bk, Primenenie aerozolei dlya bor'by s vreditel'nyami lesa, -- Moskva, Goslesbumizdat, 1962, 86 pp.  
\*CSFTI TT 68-50364

Points in the Kinetics of Color Development, by V. I. Usenskiy, N. I. Rodionova.  
RUSSIAN, per, Zhurnal Nauchoy i Prikladnoy Fotografii i Kinematografii, Vol 6, No 2, Mar-Apr 1961, pp 125-129.  
\*ACSI J-4356  
ID 2204005868

Scientific  
Methods & Equipment (Contd)

A method for Measuring Deformations, by I. S. Sheynin.  
RUSSIAN, Patent No 195689, Class 42.  
\*FTD-HT-23-137-68G

A Device for the Automatic Calculation of Correlation Functions of Acoustic Signals, by D. Berthier, 15 pp.  
FRENCH, per, L'Onde Electrique, 46, No 475, 1966, pp 1067-1073. P200369867  
RSIC-690

Physics of an Aerial Photograph in Correct and Faulty Colors, by F. L. Corten.  
GERMAN, per, Bildmessung und Luftbildwesen, Vol 34, 1 Dec 1966, pp 191-198.  
\*ACSI J-4359  
ID 2204006168

Current State of Development of Soft and Semi-Hard Packings, by R. Heiss & K. Becker.  
GERMAN, per, Bundeswehrverwaltung (Sonderheft 6 Lebensmittel Technologie Und Verpackung G 2006E), p 65.  
\*ACSI J-4326  
ID 2834022567

Missile Technology

Electronics in Military Science, by J. Jecmen, 344 pp.  
CZECH, bk, Elektronika ve Vojenstvi, 1964, pp 1-298. P100035568-V  
FTD-HT-66-477

The Way I See Missile Systems, by C. Drosynakis.  
GREEK, 1967.  
\*ACSI J-4362  
ID 1837008867

Warheads of Surface-to-Air Guided Missiles, by S. Roglic, 31 pp.  
SERBO-CROATIAN, per, Vazduhoplovni Glasnik, No. 2, 1966, pp. 131-149. P100006868  
FTD-HT-67-462

Damping in Inertial Navigational Systems, by O. P. Boychuk.  
RUSSIAN, per, AN UkrRSR. Dopovidi, Seriya A. Flayko-Tekhnichni ta Matematychni Nauky, No 3, 1967, pp 250-254.  
\*FTD-HT-23-167-68.

Electroautomation of Ship and Aircraft Radar Stations, by V. M. Artamonov, 473 pp.  
RUSSIAN, bk, Elektroavtomatika Sudovykh i Samoletnykh Radiolokatsionnykh Stantsiy, 1962, pp 1-363.  
P100029268-V  
FTD-MT-64-352

Resolution of High-Directional Antennas with Strong Fluctuation of Field Distribution, by Yu. A. Kravtsov.  
RUSSIAN, per, VUZ, Izv., Radiofiz., Vol 10, No 8, 1967, pp 1131-1140.  
\*Dept of Navy/APL/JHU J-1130

Results of Computations of Radiowave Refraction in a Horizontally-Inhomogeneous Troposphere and Ionosphere, by A. N. Kazantsev.  
RUSSIAN, per, Kosmicheskie Issledovaniya, Vol 5, No 5, 1967, pp 766-771.  
Dept of Navy/APL/JHU T-2095

Principles of the Theory of Automated Air Navigation, by N. G. Rachkovskiy.  
RUSSIAN, bk, Osnovy Teorii Avtomatizirovannogo Samoletovosbdeniya, 1966, 126 pp.  
\*FTD-MT-24-51-68

Complex Signals and the Principle of Ambiguity in Radar, by D. Ye. Vakman.  
RUSSIAN, bk, Slozhnyye Signaly i Printsip Neopredelennosti v Radiolokatsii, 1965, 303 pp.  
\*FTD-MT-24-55-68

Leading Television Center of the USSR, by I. I. Govallo and Yu. B. Gruzdev, 26 pp.  
RUSSIAN, journal, Tekhnika Kino i Televideniya, No. 12, Moscow, Dec 67, pp. 3-14.  
JPRS 44,191

Transport and Communications in the USSR, by R. I. Kushkina, 303 pp.  
RUSSIAN, bk, Transport i Svyaz' SSSR, Statisticheskiy Sbornik, Moscow, "Statistika" Publishing House, 1967, pp. 1-332.  
JPRS 44,308

Design of Inertial Guidance Systems, by N. Ya. Vovchenko, 13 pp.  
RUSSIAN, per, Aviatsionnyy Institut, Trudy, Moscow, No. 161, 1965, pp. 76-85. P100009068  
FTD-HT-23-573-67

Electrocommunication and Radio During Half a Century.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 14-45.  
JPRS 44475

We Are Developing Skilled Communications Specialists, by V. N. Lebedev.  
RUSSIAN, per, Vestnik Svyazi, Vol 27, No 11, 1967, pp 60-64.  
JPRS 44475

Device for Synchronizing Binary Communications, by V. V. Makhonin.  
RUSSIAN, Patent No 197273, Class 42.  
\*FTD-HT-23-137-68B

RVG 960 Microwave Radio Relay System, by G. Findeisen, 10 pp.  
GERMAN, journal, Der Fernmelde-Praktiker, Vol 7, No. 12, East Berlin, Dec. 67, pp. 273-275.  
JPRS 44,236

On the Applications of Infrared Imagery for Geothermal Investigations, by Hirokasu Hase, Kyuya Matsuno, 14 pp.  
JAPANESE, per, Chinetsu, No 11, Jun 1967.  
ACSI J-3631  
ID 2204052067

Ambiguity Characteristics of a Pulse-Code Radar, by Toshifusa Sakakoto.  
JAPANESE, per, Sogoshikenjo nenpo, Vol 22, No 1, 1963, pp 37-48.  
Dept of Navy/APL/JHU T-2049

Description of New Carrier Telephone Equipment, by Jerzy Gadwed, 10 pp.  
POLISH, per, Przeglad Kolejowy Elektrotechniczny, Vol XIV, No. 11, Warsaw, Nov 67, pp. 330-333.  
JPRS 44,236

Scientific  
Navigation, Communications, Detection &  
Countermeasures (Contd)

Electronic Digital Computers in Telecommunications, by Jerzy Wyrzykowski, 13 pp.  
POLISH, per, Przegląd Komunikacyjny,  
Warsaw, No. 11, Nov 67, pp. 415-419.  
JPRS 44,363

Exhibit of Magnetic Defectoscopes.  
CROATIAN, per, Strojarska Vyroba, Vol 15, No  
10, 1967, pp 750-752.  
\*ACSI J-4247  
ID 2204002768

Nuclear Science & Technology

Heat Transfer Systems of Nuclear Reactors, by  
A. G. Samoilov.  
RUSSIAN, bk, Dispersionnye teplovydelyayushchie  
elementy yadernykh reaktorov, Moskva, 1965,  
340 $\frac{1}{2}$  pp.  
\*CSFTI TT 68-50327

Dynamic Decompensation of the Space Charge of  
Ion Beams during Electromagnetic Separation  
of Isotopes, by B. Ye. Gavrilov, A. V. Zharinov,  
13 pp.  
RUSSIAN, per, Moscow. Institut Atomnoy Energii  
Doklady, No 592, 1964, pp 3-20.  
P100013568  
FTD-MT-66-148

The Use of Atomic Energy in Water Transportation,  
by V. V. Lakhmanin & Yu. V. Zakharov.  
RUSSIAN, bk, Ispol'zovaniye atomnoy energii na  
vodnom transporte, 1965.  
Dept of Navy NIC tr 2527

Application of Electron Microscopy to the Study  
of Radiation Defects in Alkali Halide Crystals,  
by Yu. Ekmans.  
RUSSIAN, per, Investiya. AN IatSSR, No 4, 1965,  
pp 55-61.  
\*FTD-HT-23-147-68

Processing and Disposal of Radioactive Wastes  
from Laboratories, by E. Ya. Spitsyn.  
RUSSIAN, bk, Pererabotka i zakhroneniye  
radioaktivnykh otkhodov laboratorii, Moskva,  
1965, 130 pp.  
\*CSFTI TT 68-50326

Scientific  
Nuclear Science & Technology (Contd)

Radiation and Polymers, by I. M. Barkalov, 8 pp.  
RUSSIAN, per, Priroda, No 2, 1965, pp 13-17.  
ACSI J-3966  
ID 2204060267

3 4  
The Use of D(d,n)He AND T(d,n)He Nuclear  
Reactions to Calibrate Fast-Neutron Radio-  
meters, by R.D. Vasil'yev, G.A. Dorofeyev,  
et al., 6 pp.  
RUSSIAN, journal, Soyuznyy Nauchno-Issledovatel'-  
skiy Institut Priborostroyeniya. Doklady,  
No. 3, 1966, pp. 22-25. P100007568  
FTD-HT-23-816-67

Trends in the Development of Radiation Chemistry,  
by I. V. Vereshchinskiy, P. I. Dolin, 4 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, No 1,  
1961, pp 116-119.  
ACSI J-3969  
ID 2204060567

Radiation Effects on Polymers, by Marcel Van  
de Voorde, 15 pp.  
FRENCH, per, Industries Atomiques, No 3/4, 1967,  
pp 61-70.  
P911040568  
AEC-TR-6920

Isotope Practice  
GERMAN, per, Akademie-Verlag-GMBH, Vol 1, No 3, 1965.  
Dept of Navy NIC 2501

A Simple Method for the Determination of  
the Distribution of Thermal Neutron Flows,  
by S. Deme and I. Feher, 8 pp.  
GERMAN, per, Kernenergie, Vol 9, No 2,  
1966, pp 54-57. P100016468  
FTD-HT-23-703-67

Fast Fuel Element Testing Reactor (P.E.C.),  
Preliminary Design Study, Section I, by P.  
Aiello, 71 pp.  
ITALIAN, rpt, Comitato Nazionale per l'Energia  
Nucleare C.N.E.N.-EURATOM Association for Fast  
Reactors, 31 July 1966.  
P911013768  
AEC ORNL-TR-1786

China's Second Atomic Test Site.  
JAPANESE, per, Koko Joho Shiryō, No 103, 1966,  
pp 36-39.  
\*ACSI J-4389  
ID 2204003768

Scientific  
Physics

Atlas of Electron Spin Resonance Spectra:  
Theoretically Calculated Multicomponent Sym-  
metrical Spectra, by Ya. S. Lebedev,  
N. N. Tikhomirova, et al. 229 pp.  
RUSSIAN, bk. Volume 1, 1963.  
Plenum Press

Atlas of Electron Spin Resonance Spectra:  
Theoretically Calculated Multicomponent Sym-  
metrical Spectra, by Ya. S. Lebedev,  
N. N. Tikhomirova, et al. 195 pp.  
RUSSIAN, bk. Volume 2, 1964.  
Plenum Press

Chemical Bonds in Semiconductors and Solids.  
294 pp.  
RUSSIAN, rpt. Apr 1967.  
Consultants Bureau

Handbook of the Physicochemical Properties of  
the Elements. 910 pp.  
RUSSIAN, bk, Oct 1967.  
Plenum Press Data Division

Molecular Flow in Vessels, by Yu. N. Lyubotov.  
164 pp.  
RUSSIAN, bk, Mar 1967.  
Consultants Bureau

Nuclear Magnetic Resonance in a Flowing Liquid,  
by A. I. Zhernovoi. 166 pp.  
RUSSIAN, bk, 1965.  
Plenum Press

Quantum Field Theory and Hydrodynamics. 271 pp.  
RUSSIAN, rpt, Apr 1967.  
CONSULTANTS BUREAU

Effect of Simultaneous Vibrational and Dissociating  
Relaxation on Supersonic Flow Past Blunt Bodies,  
by S. B. Koleshko, Yu. P. Lam'kin.  
RUSSIAN, bk, Aerofizicheskiye Issledovaniya  
Sverkhzvukovykh Tekheniy, 1967, pp 142-163.  
\*FTD-HT-23-109-68C

Heat Exchange During Condensation of Potassium  
and Sodium Vapor, by V. I. Subbotin, M. N.  
Ivanovskiy.  
RUSSIAN, per. AN BSSR, Institut Teploi Massobmena.  
Obshchiye Voprosy Teplo- i Massobmena, 1966,  
pp 247-255.  
\*FTD-MT-24-54-68

Acceleration of Particles with Interaction  
Between High Frequency Fields and a Plasma, by I.  
S. Danilkon, M. D. Rayner.  
RUSSIAN, per. AN SSSR, Fizicheskiy Institut.  
Trudy, Fizika Plazmy, Vol 32, 1966, pp 165-172.  
\*FTD-MT-24-52-68

Scientific  
Physics (Contd)

Effects of Variable Heat Capacity of a Gas in  
Supersonic Flow Past Blunt Bodies, by Yu. P.  
Lam'kin, T. Ya. Timofeyeva.  
RUSSIAN, bk, AN SSSR, Fiziko-Tekhnicheskiy In-  
stitut, Aerofizicheskiye Issledovaniya Sverkh-  
zvukovykh Tekheniy, 1967, pp 128-142.  
\*FTD-MT-24-49-68

Method of Asymptotic Integration of Laminar Boun-  
dary Equations, by B. I. Reznikov.  
RUSSIAN, per, AN SSSR, Fiziko-Tekhnicheskiy  
Institut, Aerofizicheskiye Issledovaniya Sverkh-  
zvukovykh Tekheniy, 1967, pp 284-300.  
\*FTD-MT-24-34-68

The Growing of Single Crystals of Calcite  
Under Hydrothermal Conditions, by  
N.Yu. Ikornikova, et al., 5 pp.  
RUSSIAN, per, AN SSSR, Institut Kristallografii.  
Rost Kristallov, No. 4, 1964, pp. 92-94.  
P100008168  
FTD-HT-23-563-67

X-Ray Effects in Alkali Halide Crystals After  
Irradiation by Protons, by S. T. Konobeyevskiy,  
F. P. Butra.  
RUSSIAN, per, AN SSSR, Otdeleniye Fiziko-  
Matematicheskikh Nauk, 1962, pp 251-256.  
\*FTD-MT-24-28-68

Self-Oscillating Systems, by K. F. Teodorchik,  
195 pp.  
RUSSIAN, bk, Avtokolebatel'nyye Sistemy, 1952,  
271 pp.  
ACSI J-3539  
ID 2204049167

On the Effect of Archimedeian Forces on the Structure  
of the Temperature Field in a Turbulent Flow, by  
A. M. Obukhov.  
RUSSIAN, per, AN SSSR, Doklady, Vol 125, No 6,  
1959, pp 1246-1248.  
Dept of Navy/APL/JHU T-2109

A Generalization of the Law of Thermal Conductivity,  
by B. M. Berkovskii.  
RUSSIAN, per, AN BSSR, Doklady, Vol 11, No 9,  
1967, pp 793-794.  
Dept of Navy/APL/JHU T-2106

Dosimetry of Ionizing Radiations, by V. I.  
Ivanov, 252 pp.  
RUSSIAN, bk, Dozimetriya Ioniziruyushchikh  
Izlucheniy, 1964, pp 1-263.  
P100028768-V  
FTD-MT-65-160

Scientific  
Physics (Contd)

Elementary Plasma Physics, by  
L. A. Artsimovich, 151 pp.  
RUSSIAN, bk, Elementarnaya Fizika Plazmy,  
1963, pp 1-192.  
P100029168-V  
FTD-MT-65-443

Detonation Attenuation in Liquid Explosive Mix-  
tures of Tetranitromethane and Ethyl Iodide,  
by V. S. Solov'yev.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, No 3,  
1966, pp 31-35.  
\*FTD-HT-23-141-65

Theory of the Thermal Explosion of Self-Accelerating  
Reactions, by V. V. Barzykin.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, No 4,  
1966, pp 18-23.  
Dept of Navy/APL/JHU T-2083

Combustion of a Polydisperse Spray of Liquid  
Fuel, by R. S. Tyul'panov & O. P. Sobolev.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, Vol 3,  
No 1, 1967, pp 94-97.  
\*Dept of Navy/APL/JHU J-1138

Ionization of Media and Plasma Generation by  
Laser Emission, by G. A. Askarian, M. S. Rabinov-  
vich.  
RUSSIAN, per, Fizika Plazmy, Vol 32, 1966, pp 89-  
96.  
\*FTD-MT-24-42-68

Investigation of the Doppler Effect in  $^{238}\text{U}$  in  
a Shield Made of Uranium Oxide of the Reactor  
BR-1, by L. P. Abagyan, V. I. Golubev.  
RUSSIAN, rpt, International Atomic Energy Agency.  
Paper SM-101/63. Symposium on the Physics and  
Safety Problems of Fast Reactors, 11 pp.  
P911045368  
AEC ANL-TR-540

Experimental Investigation of the Heat Conducti-  
vity Coefficient of an Argon Plasma, by E. I.  
Asinovsky, A. V. Kirillin.  
RUSSIAN, rpt, International Symposium on Pro-  
perties and Applications of Low-Temperature  
Plasma, Moskva, USSR, 15-17 Jul 1965, 1965,  
pp 248-257.  
\*FTD-MT-24-58-68.

Scientific  
Physics (Contd)

Turbulent Boundary Layer of a Free Jet of Com-  
pressible Gas in Accompanying Counterflows, by  
M. P. Teterin.  
RUSSIAN, per, Inzhenernyy Zhurnal, Vol 4, No 2,  
1964, pp 330-336.  
\*FTD-MT-24-35-68

Transport Processes When Injecting a Fuel-  
Oxidizer Mixture Into a Reacting Boundary  
Layer, by A.L. Mosse and G.T. Sergeyev, 12 pp.  
RUSSIAN, journal, Inzhenerno-Fizicheskiy  
Zhurnal, Vol 10, No. 3, 1966, pp. 311-317.  
P100007668  
FTD-HT-23-790-67

Combustion of a Liquid-Fuel Droplet in a Sound  
Field, by V. E. Nakoriakov.  
RUSSIAN, per, Inzhenero-Fizicheskiy Zhurnal, Vol  
12, May 1967, pp 650-656.  
\*FTD-MT-24-26-68

Experience Gained in the Operation of the  
VVR-M Reactor, by V.M. Pasechnik, et al,  
23 pp.  
RUSSIAN, bk, Isucheniye i Uluchsheniye  
Eksploataatsionnykh Vozmozhnostey i Opyt  
Eksploataatsii Reaktora VVR-M Instituta  
Fiziki AN UkSSR, Kiev, 1963, pp. 1-18.  
JPRS 44,332

Criterial Equations of Nonsteady Heat and  
Mass Transfer in Moist Materials, by  
Yu. Mikhaylov, 5 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya, Energetika,  
No. 10, 1962, pp. 87-89. P100008068  
FTD-HT-67-475

Heat Transfer in a Transverse Homogeneous  
Magnetic Field, by Yu. A. Mikhaylov and  
R. Ya. Ozols, 10 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya.  
Seriya Fizicheskikh i Tekhnicheskikh Nauk,  
No 2, 1963, pp 19-26.  
P100017568  
FTD-HT-67-476

Scientific  
Physics (Contd)

Motion Near a Phase Boundary in the Presence of An Electromagnetic Field, by U. I. Ivanov and Yu. A. Mikhaylov, 17 pp.  
RUSSIAN, per, AN LATSSR. Izvestiya. Seriya Fizicheskikh i Tekhnicheskikh Nauk, No 1, 1966, pp 3-15.  
P100017768  
FTD-HT-67-478

Flow Around a Flat Blunt Plate under a Small Angle of Attack with a Hypersonic Gas Stream, by V. I. Kholyavko, 8 pp.  
RUSSIAN, per, AN SSSR. Izvestiya. Mekhanika i Mashinostroyeniye, No 2, 1964, pp 19-23.  
P100016568  
FTD-HT-66-606

The Effect of Radiation on Flow in the Region of the Stagnation Point, by V. K. Vertushkin & V. N. Zhigulev.  
RUSSIAN, per, AN SSSR. Izv., Mekh. Zhidkosti i Gaza, No 2, 1967, pp 30-32.  
Dept of Navy/APL/JHU T-2099

Plotting the Flow Pattern of a Fluid Flowing Past a Solid Body Surrounded by an Air Space, by M. V. Tret'yakov.  
RUSSIAN, per, AN SSSR. Izv., Mekh. Zhidkosti i Gaza, No 2, 1967, pp 67-71.  
Dept of Navy/APL/JHU T-2110

Supersonic Three Dimensional Flow Around a Triangular Wing with Blunted Edges.  
RUSSIAN, per, Izvestiya. AN SSSR. Mekhanika Zhidkosti i Gaza, Jul/Aug 1967, pp 159-163.  
\*FTD-HT-23-150-68

Numerical Investigation of a Three Dimensional Boundary Layer in a Compressible Gas.  
RUSSIAN, per, Izvestiya. AN SSSR. Mekhanika Zhidkosti i Gaza, Jul/Aug 1967, pp 171-177.  
\*FTD-HT-23-150-68

Certain Characteristics of Radiative Centers in Synthetic Germanium-Doped Quartz, by Sh. Vakhidov, G. Ikramov, 4 pp.  
RUSSIAN, per, AN UZSSR. Izvestiya. Seriya Fiziko-Matematicheskikh Nauk, No 4, 1966, pp 50-52.  
P100013868  
FTD-HT-67-426

Scientific  
Physics (Contd)

The Effect of Radiation on the Contract Melting of Crystals, by I. G. Bersina, P. A. Savintsev.  
RUSSIAN, per, Izv. Tomskogo Politekh. In-ta, No 122, 1962, pp 33-38.  
\*FTD-HT-23-111-68

Toward the Determination of Linearized Perturbation Flows in the Hypersonic Flow over Conical Bodies without Axial Symmetry, by A. M. Mkhitarayan, M. P. Ovsyannikov, 9 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 7-14.  
P100029868-V  
FTD-MT-65-72

On the Theory of Sandwich Type Shells, by B. G. Gazizov, 13 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 24-34.  
P100029868-V  
FTD-MT-65-72

Investigation of the Stability of the Shell of An Air Cooled Sleeve Type Bypass Blade, by A. G. Zenukov, 12 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 35-45.  
P100029868-V  
FTD-MT-65-72

On the Question of Increasing the Vibration Stability of Structural Members, by P. S. Skachkov, 9 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 46-53.  
P100029868-V  
FTD-MT-65-72

Investigation of the Influence of the Vibrations of a Body on the Coefficient of Heat Transfer under Conditions of Free Convection, by L. I. Kudryashev, Yu. A. Tkachev, 10 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 54-62.  
P100029868-V  
FTD-MT-65-72

Scientific  
Physics (Contd)

Towards the Determination of the Velocity of Sound in Hydraulic Lines of Complex Cross Section, by V. F. Prisyakov, 9 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 63-70.  
P100029868-V  
FTD-MT-65-72

Turbulent Mixing of Fluid Flows in a Limited Space with Peculiarities in the Feed of One of the Flows, by A. P. Pudovveyev, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 71-77.  
P100029868-V  
FTD-MT-65-72

Temperature State of a Porous Plate with Volume Heat Release for Effusional Cooling, by V. K. Shchukin, A. F. Koval'nogov, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 87-94.  
P100029868-V  
FTD-MT-65-72

On the Pressure Coefficient at Hypersonic Velocities, by S. V. Fal'kovich, N. G. Bol'man, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 111-114.  
P100029868-V  
FTD-MT-65-72

Investigation of Vibrations of Cantilevered Triangular and Trapezoidal Plates by the Ritz Method, by G. A. Marchenko, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 115-119.  
P100029868-V  
FTD-MT-65-72

Experimental Investigations of a Fuel Evaporator, by I. N. Dyatlov, 7 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 124-131.  
P100029868-V  
FTD-MT-65-72

Scientific  
Physics (Contd)

Nonstationary Temperature Field in Sandwich Plates, by M. A. Il'gamov, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 132-138.  
P100029868-V  
FTD-MT-65-72

The Influence of An Attached Volume on the Speed of Rotation of a Stall Zone, by N. I. Sapozhnikov, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 139-143.  
P100029868-V  
FTD-MT-65-72

On the Question of Determining the Components of Contact Thermal Resistance, by P. Ye. Khizhnyak, 5 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 144-148.  
P100029868-V  
FTD-MT-65-72

Influence of the Magnitude of Bolt Tightening on the Strength of Bolt Joints, by A. I. Yarkovets, 8 pp.  
RUSSIAN, Col of Art, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 1, 1965, pp 149-155.  
P100029868-V  
FTD-MT-65-72

Experimental Investigation of the Influence of Thermodynamic Properties of Liquid on Cavitation Phenomena, by N. S. Yerшов, B. I. Borovskiy, 11 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, No 2, 1966, pp 130-136.  
P100014768  
FTD-MT-67-40

Flow Field Between a Shock Wave and the Lateral Surface of a Blunt Cone Moving at a High Supersonic Speed, by E. R. Abramovskii.  
RUSSIAN, per, VUZ, Izv., Aviatsionnaya Tekhnika, No 1, 1967, pp 135-142.  
Dept of Navy/APL/JHU T-2098



Scientific  
Physics (Contd)

The Effect of Initial Turbulence on the Efficiency of Diffuser Flows, by V.K. Migay, 5 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy Energetika, No. 2, pp. 116-119.  
P100008868  
FTD-HT-23-536-67

Dependence of the Results of Probe Measurements of the Conductivity of Semiconductor Samples on Their Thickness, by A. I. Emel'yanov.  
RUSSIAN, per, VUZ, Izv. Fiz., No 5, 1967, pp 114-116.  
Dept of Navy/APL/JHU T-2105

On the Nature of High-Voltage Photo-emf in Thin Semiconductor Layers, by N. F. Kovtonyuk & V. F. Fedenin.  
RUSSIAN, per, VUZ, Izv., Fiz., No 6, 1967, pp 40-43.  
\*Dept of Navy/APL/JHU J-1114

Experimental Investigation of Gas Laser Emission Absorption in Air on the 3.39 and 3.51- $\mu$  Wave-lengths, by V. A. Antipov.  
RUSSIAN, per, VUZ, Izv., Fiz., No 7, 1967, pp 142-144.  
\*Dept of Navy/APL/JHU J-1128

The Frenkel Effect in Semiconductor Diodes, by V. I. Gagan.  
RUSSIAN, per, VUZ, Izv., Fiz., Vol 9, 1967, pp 92-95.  
\*Dept of Navy/APL/JHU J-1120

Convective Heat Transfer in Two-Phase Flows, by V. M. Borishanskii & I. I. Paleev.  
RUSSIAN, bk, Konvektivnaya teploperedacha v dvukhfaznom i odnofaznom potokakh, Moskva-Leningrad, 1964, 447 pp.  
\*CSFTI TT 68-50328

Traveling-Wave Tube, by M. B. Tsytlin, 228 pp.  
RUSSIAN, bk, Lampa S Begushchey Volnov, 1964, pp 1-311.  
P100029368-V  
FTD-MT-65-453

Scientific  
Physics (Contd)

Method of Moments in the Problem of Hypersonic Rarefied Gas Flow Past Bodies, by Yu. Shlaza, 18 pp.  
RUSSIAN, per, Leningrad. Universitet. Vestnik, Seriya Matematiki, Mekhaniki i Astronomii, No. 3, 1966, pp. 101-112.  
P100006168  
FTD-HT-23-923-67

Metallography, Physical Chemistry, and Physics of Superconductors, by E. M. Savitskiy, V. V. Baron.  
RUSSIAN, bk, Metallovedenie, Fiziko-Khimiya i Metallofizika Sverkhprovodnikov, 1967.  
Plenum Press

Toward Calculation of Beams on Elastic Supports, by P. P. Suvorovskiy, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskii Zhurnal. Akademii Stroitel'stva i Arkhitektury SSSR. "Stroitel'naya Mekhanika i Raschet Sooruzheniy", No 3, 1963, pp 12-15.  
P100015668  
FTD-MT-66-24

Concerning the Question of Solution of Two-Dimensional Problem of Theory of Elasticity by Analogy Method with Bending of Plate, by G. A. Geniyev, 8 pp.  
RUSSIAN, per, Nauchno-Tekhnicheskii Zhurnal. Akademii Stroitel'stva i Arkhitektury SSSR. "Stroitel'naya Mekhanika i Raschet Sooruzheniy", No 3, 1963, pp 5-7.  
P100015668  
FTD-MT-66-24

The Stressed State of a Viscoelastic Non-uniformly Heated Cylinder With a Starshaped Cavity, by V.G. Savchenko, 12 pp.  
RUSSIAN, per, Nauchnoye Soveshchaniya po Teplovym Napryazheniyam v Elementakh Konstruktsiy, 6 d, Kiev, 1966, pp. 137-146.  
P100006268  
FTD-MT-23-591-67

Fiber Optics in the USSR, by Dr. V.B. Veynberg, 8 pp.  
RUSSIAN, per, Optiko-Mekhanicheskaya Promyshlennost', No. 11, 1967, pp. 48-51.  
JPRS 44,272

Scientific  
Physics (Contd)

Application of Method of Small Parameter to Analysis of Hypersonic Flow of Gas around Flat Bodies, by A. M. Antonov, A. G. Stetsenko, 10 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 3-10.  
P100028968-V  
FTD-MT-64-322

Influence of Hysteresis Motor on Stability of Motion of Gyroscope in Cardan Joint Suspension, by R. M. Borodina, 9 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 11-18.  
P100028968-V  
FTD-MT-64-322

On Numerical Solution of Three-Dimensional Boundary Value Problems of Theory of Potential by Method of Sum Representations, by V. P. Gatun, 10 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 19-26.  
P100028968-V  
FTD-MT-64-322

Concerning the Question of Stability of Motion in One Case of the Three Bodies, by M. M. Zatenyakin, 7 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 27-32.  
P100028968-V  
FTD-MT-64-322

On the Influence of Random Forces on Nonlinear Oscillatory Systems, by V. G. Kolomiyets, 8 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 40-46.  
P100028968-V  
FTD-MT-64-322

Random Shocks in Linear Dynamic Systems, by V. D. Mil'man, A. D. Myshkis, 21 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 64-81.  
P100028968-V  
FTD-MT-64-322

Scientific  
Physics (Contd)

Appearance of Theory of Potential of Double Layer and Its First Applications to Solution of Certain Boundary Value Problems, by V. S. Sologub, 14 pp.  
RUSSIAN, Col of Art, Priblizhennyye Metody Resheniya Differentsial'nykh Uravneniy, AN UKR-SSR. Institut Matematiki, 1963, pp 110-125.  
P100028968-V  
FTD-MT-64-322

Carrying Ability of a Hollow Spherical Shell, Strengthened along the Contour, by O. N. Shablyi, 7 pp.  
RUSSIAN, per, Prikladnaya Mekhanika, Vol 1, No 11, 1965, pp 7-11. P100029468  
FTD-MT-66-584

Plasma Jet Interactions, by V. T. Tolok.  
RUSSIAN, per, Problemy Termoyadernykh Issledovaniy. Novoye V Zhisad, Nauke, Tekhnike, Seriya IX: Fizika, Matematika, Astronomiya, No 21, 1965, pp 18-25.  
\*FTD-MT-24-48-68

Self-Turning Circuit for the Reception of Binary Signals under Conditions of Noise with Unknown Statistical Characteristics, by A. N. Klimov, G. N. Potapov.  
RUSSIAN, bk, Samoobuchay Ushchiyevaya Avtomaticheskoye Sistemy, 1966, pp 402-407.  
\*FTD-MT-23-112-68

Theory of Linear Accelerators, by A. D. Vlasov.  
RUSSIAN, bk, Teoriya lineinykh uskoritelei, Atomizdat, Moskva, 1965, 304 pp.  
\*CSFTI TT 68-50322

Theory of Nuclear Magnetic Resonance, by L. V. Aleksandrov, 184 pp.  
RUSSIAN, bk, Teoriya Yadernogo Magnitnogo Rezonansa, 1964, pp 1-208.  
P100029768-V  
FTD-MT-65-429

Effect on the Lubricating Property of a Surface on the Transfer Process in Systems Consisting of a Drop-Form Liquid and a Solid, by B. M. Smol'skiy and I. T. El'perin, 10 pp.  
RUSSIAN, per, Teplota i Massoobmen Tezhe Okruzhayushchey Gazovoy Sredoy, Nauka i Tekhnika, 1965, pp 130-137.  
P100016868  
FTD-MT-66-595

Scientific  
Physics (Contd)

Edge Effects in Linear Induction Pumps,  
by L. Ya. Ulanis, 15 pp.  
RUSSIAN, per, AN LATSSR. Institut Fiziki.  
Trudy, No 8, 1956, pp 81-94.  
P100014868  
FTD-HT-67-469

The Ionization Processes Associated with Metallic  
Additives in Flame Gases, by A. N. Hayhurst, T.  
M. Sugden.  
RUSSIAN, rpt, Trudy. Mezhdunarodnyi Simpozium po  
Svoystvam i Primeneniyu Niskotemperaturnoy Plazmy.  
1967, pp 63-76; 75-77.  
\*FTD-MT-24-58-68

Dependence of the Coefficient of Friction  
and Wear on Stresses in Surface Layer of  
Rubbing Bodies, by A. A. Dychko, 12 pp.  
RUSSIAN, per, Trudy Omskogo Instituta  
Inzhenerov Zheleznodorozhnogo Transporta.  
Vol 43, 1963, pp 197-210.  
P100014468  
FTD-MT-66-38

Physical Bases of the Nature of Friction,  
Wear and Gripping of Metals at Low Temper-  
atures, by A. A. Dychko, 14 pp.  
RUSSIAN, per, Trudy Omskogo Instituta  
Inzhenerov Zheleznodorozhnogo Transporta.  
Vol 43, 1963, pp 221-235.  
P100014468  
FTD-MT-66-38

Twelfth International Conference on High Energy  
Physics, Dubna, August 5-15, 1964.  
RUSSIAN, per, XII Mezhdunarodnaya Konferentsiya  
po fizike vysokikh energii Dubna, 5-15 Avgusta.  
1964, Vols I and II, 1966, 987 pp.  
\*CSFTI TT 68-50325/1-2

On the Thermal Effect Produced with a Ruby Laser  
Beam Interacts with a "Transparent" Crystal, by  
V. M. Vatul'ov.  
RUSSIAN, per, Ukrains'kyi Fizicheskyy Zhurnal. Vol  
12, No 7, 1967, pp 1200-1202.  
\*FTD-HT-23-65-68

The Theory of Mobility, Hall Effect and Magneto-  
resistance in Semiconductors with Non-Uniform  
Concentration of Charged Ions, by Yu. V. Kornyushin.  
RUSSIAN, per, Ukr. Fis. Zh., Vol 12, No 8, 1967,  
pp 1327-1330.  
\*Dept of Navy/APL/JHU J-1115

Scientific  
Physics (Contd)

Equations of State of Solids at High Pressures  
and Temperatures, by V. N. Zharkov,  
V. A. Kalinin.  
RUSSIAN, bk, Uravneniya Sostoyaniya Tverdykh  
Tel pri Vysokikh Davleniyakh i Temperaturakh,  
1968  
Plenum Press

Problems of Quantum Radiophysics and Propagations  
of Radio Waves, by O. A. Krokhin, 2 pp.  
RUSSIAN, per, AN SSSR. Vestnik, No 6, 1965, pp  
101-102. P100029968  
FTD-HT-66-576

Aleksandr Danilovich Aleksandrov (On His  
Fiftieth Birthday), by S. V. Vallander,  
G. I. Petrashen', 4 pp.  
RUSSIAN, per, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki  
i Astronomii, No 1, 1963, pp 7-9.  
P100028868-V  
FTD-MT-64-145

Propagation of Elastic-Plastic Load Wave in  
a Rod of Finite Length, by A. I. Buravtsev,  
10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 79-85.  
P100028868-V  
FTD-MT-64-145

Small Parameter Method for Hypersonic Ideal  
Gas Flow around Pointed Bodies, by G. Baush,  
5 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 86-89.  
P100028868-V  
FTD-MT-64-145

Plane Motion of Vessel with the Wind, by  
A. P. Vorob'yev, 6 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo  
Universiteta. Seriya Matematiki. Mekhaniki i  
Astronomii, No 1, 1963, pp 90-95.  
P100028868-V  
FTD-MT-64-145

Scientific  
Physics (Contd)

On Certain Peculiarities of Gas Motion at Hypersonic Speeds, by A. A. Grib, G. Baush, 11 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki Mekhaniki i Astronomii, No 1, 1963, pp 96-105.  
P100028868-V  
FTD-MT-64-145

About Selection of Optimum Parameters of Vibrator of Loop Oscillograph, by A. Yu. L'vovich, V. S. Sabaneyev, 10 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 106-114.  
P100028868-V  
FTD-MT-64-145

Virtual Masses of An Elliptic Cylinder during Motion in Liquid, Limited by a Flat Wall or a Free Surface, by V. A. Sabaneyev, 11 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 115-123.  
P100028868-V  
FTD-MT-64-145

Oscillations of An Asymmetric Body on Elastic Stretching, by S. A. Zegzhda, 5 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 145-148.  
P100028868-V  
FTD-MT-64-145

On Possibility of Numerical Solution of Laminar Boundary Layer Problem on Semi-Infinite Body with Suction in Dissociating Gas, by L. A. Kulonen, 3 pp.  
RUSSIAN, Col of Art, Vestnik Leningradskogo Universiteta. Seriya Matematiki. Mekhaniki i Astronomii, No 1, 1963, pp 148-150.  
P100028868-V  
FTD-MT-64-145

Impact of a Supersonic Jet on a Surface, by A. Ya. Sagomonyan 9 pp.  
RUSSIAN, per, Vestnik Universitet. Seriya I. Matematika. Mekhanika, No. 6, 1966, Moscow, pp: 98-103, P100006768  
FTD-HT-23-924-67

Scientific  
Physics (Contd)

Measurement of Magnetic Field Induction Components in the Gap of An Induction Pump, by L. Ya. Ulmanis, 7 pp.  
RUSSIAN, per, Voprosy Magnitnoy Gidrodinamiki, 1963, pp 153-159.  
P100018268  
FTD-HT-67-473

Application of the Theory of Heredity to the Problem of the Recalculation of Data Pertaining to the Relaxation of Creep Stresses, by A. A. Chizhik, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

An Approximate Solution of the Indentation of Sloping Cones into Rigid Plastic Medium, by V. V. Varnello, 7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Calculation of a Point Explosion in Various Gases, by N. S. Mel'nikova, T. M. Salamakhin, 13 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Concerning the Attenuation of Finite-Amplitude Longitudinal Plasma Oscillations, by V. I. Karpman, 11 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964,  
P100326767  
FTD-HT-66-261

Concerning the Initial Stage of an Electrical Discharge in Water, by A. I. Ioffe, K. A. Naugol'nykh, 12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Concerning the Magnetohydrodynamic Theory of the Stability of an Inhomogeneous Ionized Gas in a Magnetic Field, by A. M. Fridman, 10 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Scientific  
Physics (Contd)

Concerning the Mechanism of the Amplification of Acoustic Vibrations by the Combustion Surface of Solid Fuel, by G. K. Karakozov, G. V. Rossikhin, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Concerning Perturbations of the Equilibrium of the Conducting Fluid in a Spherical Cavity in a Magnetic Field, by Yu. K. Bratukhin, S. I. Shliomis, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Concerning Some Estimates for the Specific Surface of Cracks Formed in the Case of Dynamic Action upon a Solid, by G. I. Barenblatt, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Concerning the Stabilization of Detonation Waves by Means of Poorly Streamlined Bodies, by M. P. Samozvantsev, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Creep at Variable Temperature under Conditions of a Complex Stressed State, by V. S. Namestnikov, 5 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Determination of the Joule Dissipation in a Channel with Dielectric Walls and One Nonconductive Partition when a Conductive Medium in an Inhomogeneous Magnetic Field Flows Along the Channel, by A. B. Vatazhin, 6 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Scientific  
Physics (Contd)

The Detonation of Condensed Explosives at Low Charge Densities, by L. N. Stesik, N. S. Shvedova, 7 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Detonation in a Gas Heated by a Shock Wave, by R. I. Soloukhin, 18 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Effect of Relaxation on the Decay of an Arbitrary Discontinuity, by V. N. Arkhipov, 12 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

The Effect of the Size of the Heating Surface Upon the Critical Heat Flow in the Case of Boiling in a Large Volume of Liquid, by G. I. Bobrovich, I. I. Gogonin, 5 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Experimental Investigation of Friction and Heat Transfer during Gas Flow in a Tube, by N. M. Belyanin, 10 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

Gas-Dynamic Analysis of the Nonsteady-State Propagation of Flame, by A. S. Pleshakov, 7 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

The Integral Characteristics of a Magnetohydrodynamic Generator with Two Pairs of Finite-Length Electrodes, by Ye. K. Kholabchevnikova, 15 pp.

RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.

PI00326767

FTD-HT-66-261

The Interaction of Shock Waves in an Locally  
Conductive Bar with Weak Magnetic Fields,  
by V. I. Korobeynikov, 5 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Investigation of Normal Reflection of Shock  
Waves in a Shock Tube, by S. G. Zaytsev, Ye. V.  
Lazareva, 16 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Measuring the Turbulent Velocity of Flame  
Propagation by the Inverse-Cone Method, by I. L.  
Kuznetsov, M. D. Malanov, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Nonlinear Interaction of a Spherical  
Shock Wave, Originating As A Result of the  
Explosion of a Shaped Charge with the Free  
Surface of the Water, by B. I. Zaslavskiy,  
14 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Postcritical Deformations and the Stability  
of a Sloping Spherical Segment, by L. I.  
Shkutin, 8 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Propagation of a Shock Wave in a Nonhomo-  
geneous Atmosphere in the Direction of Dimin-  
ishing Density, by Yu. P. Rayzer, 14 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

The Reflection of Plane Elastic Waves from  
an Arbitrary Inhomogeneous Layer in the Case  
of Normal Incidence, by E. V. Nikol'skiy,  
10 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Rotational Relaxation of Diatomic Molecules  
in a Light Inert Gas, by M. N. Safaryan, Ye.  
V. Stupochenko, 12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964,  
P100326767  
FTD-HT-66-261

Some Questions Regarding the Theory of the  
Electrode Layer of a Change in Potential,  
by G. A. Lyubimov, 15 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964,  
P100326767  
FTD-HT-66-261

The Steady-State Flow of an Anisotropically Con-  
ductive Liquid between Parallel Porous Walls,  
by I. P. Semenova, 9 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Theory of the Tixotropy of Viscoelastic Media  
with a Continuous Distribution of the Relaxa-  
tion Time, by A. I. Leonov, 22 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964,  
P100326767  
FTD-HT-66-261

Torsional Loss of Stability in the Case of  
Plastic Deformations, by V. D. Klyushnikov,  
7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

A Two-Dimensional Periodic Contact. Contact  
Resistance with Account Taken of Secondary  
Flows in the General Case, by A. L. Stasenko,  
12 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i  
Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Scientific  
Physics (Contd)

Viscoplastic Flow in Noncircular Cylinders in the Presence of a Pressure Gradient, by G. I. Bykovtsev and A. D. Chernyshev, 7 pp.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 4, 1964.  
P100326767  
FTD-HT-66-261

Approximate Equation of State of Solids, by V. P. Koryavov, 5 pp.  
RUSSIAN, per, Zh Prikl Makh Tech Fiz, No 5, 1964, pp 123-126.  
P911016668  
AEC ANL-TR-536

Theory of the Motion of a Vortex Ring Subjected to Gravity Force. Ascent of Atomic Cloud, by A. T. Onufriyev.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 2, 1967, pp 3-61.  
\*FTD-MT-24-53-68

Breakdown of Transparent Polymers by Powerful Light Pulses at Various Temperatures, by N. N. Vsevolodov, N. F. Novikov.  
RUSSIAN, per, Zhurnal Prikladnoy Mekhaniki i Tekhnicheskoy Fiziki, No 2, 1967, pp 86-89.  
\*FTD-MT-24-53-68

Gradient Method of Solving One Class of Optimal Control Problems, by O. V. Vasil'yev.  
RUSSIAN, per, Zhurnal Vychislitel'noy Matematiki i Matematicheskoy Fiziki, Vol 7, No 1, 1967, pp 52-61.  
\*FTD-HT-23-158-68

Mirror-Lens Objective, by V.F. Babintsev and L.G. Kochetova, 4 pp.  
RUSSIAN, patent, Patent No. 162682 (Appl. No. 840779/26-10, June 8, 1963), 2 pp.  
P100007768  
FTD-HT-66-663

An Extremely Sensitive Flow Regulator, by A. S. Brucksteyn.  
RUSSIAN, Patent No 182991, Class 47.  
\*FTD-HT-23-137-68C

The Possibility of Gas Thermal Conductivity Measurement in a Shock Tube, by V. Konicsek, 15 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 139-148. P100006568  
FTD-HT-66-680

Scientific  
Physics (Contd)

The Supersonic Wind Tunnel of the Institute for Thermomechanics, for Basic Research on Two-Dimensional Cascades, by J. Kveton, 19 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 167-179. P100006568  
FTD-HT-66-680

Heat Exchange Between a Dissociated Gas Stream and a Wall, by L. Krejci, 12 pp.  
CZECH, per, Strojnický Casopis, No. 2, 1965, pp. 191-198. P100006568  
FTD-HT-66-680

Hydrophotographic Investigation of the diffusion of water through liquid hydrocarbons, by Joesph Sivadjan, 5 pp.  
FRENCH, per, Bulletin de la Societe Chimique de France, No. 6, 1967, pp 1918-1919.  
Dept of Navy NSRDC No. 338

A Numerical Method for Analyzing Gamma Spectra, by J. P. Flandre.  
FRENCH, per, International Journal of Applied Radiation and Isotopes, Vol 18, 1967, pp 337-343.  
Dept of Navy NIC tr 2523

Physico-Chemical Calculations in Science and Industry, by H. Fromherz. 355 pp.  
GERMAN, bk, 1964 second edition.  
Plenum Press

Continuous Spectrum of the 1-ATM Argon Arc in the Spectral Range from 2700 to 500 Angstrom Units, by H. Guendel, W. Neumann.  
GERMAN, per, Beitraege aus der Plasmaphysik, Vol 7, No 3, 1967, pp 221-231.  
\*FTD-HT-23-165-68

UNILAC, a Linear Accelerator for Atomic Ions of Any Mass, by UNILAC Team, 9 pp.  
GERMAN, rpt, Institut für Angewandte Physik, Universität Heidelberg. UNILAC-Gruppe. 30 Dec 1966, 26 pp.  
P911014868  
AEC ANL-TR-533

Research Report of the Unilac Team for 1964-1966, 46 pp.  
GERMAN, rpt, Institut für Angewandte Physik, Universität Heidelberg. UNILAC-Team. UNILAC No 3-67, 1967, 84 pp.  
P911040768  
AEC ANL-TR-535

Scientific  
Physics (Contd)

Stressing and Deformation (GFK)-Laminated Structural Elements. Part I. Fundamentals of Stress and Deformation Analysis, by Alfred Puck. GERMAN, per, Kunststoffe, Vol 57, No 4, 1967, pp 284-293.  
Dept of Navy NIC tr 2524

Optimisation of the Giessen Ion Thruster, by J. Freisinger and H. Lob, 18 pp.  
GERMAN, per, Raumfahrtforschung, Vol 10, No 4, 1966, pp 174-179.  
P911017568  
AEC NP-TR-1599

Thrust-Deduction Investigations on Bodies with Blunt Ends, by H. Amsberg & W. Arlt.  
GERMAN, per, Schuff und Hafen, Vol 17, No 10, 1965, pp 786-790.  
Dept of Navy NIC tr 2519

Hit Region Theory and Linear Energy Transfer (LET) I. Survival Rate without Influence of Time Factor, by K. Gunther, H. Rossbach, 11 pp.  
GERMAN, per, Studia Biophysica, Vol 1, 1966, pp 25-36.  
P911039868  
AEC NP-TR-1561

Simplified and Expanded Theory of Barrier Layer Rectifiers, by W. Schottky, 66 pp.  
GERMAN, bk, Vereinfachte und Erweiterte Theorie der Randschichtgleichrichter, pp 539-493.  
ACSI J-3562  
ID 2204050167

The Influence of Various Charge Carrier Densities on the Optical Dispersion and Absorption of Stannous Telluride, by H. Koehler.  
GERMAN, per, Zeitschrift fuer angewandte Physik, Vol 23, No 4, 1967, pp 270-276.  
Dept of Navy NIC tr 2526

Acceleration of Inhomogeneous Plasmas by Laser Light, by H. Hora, D. Pfirsch, 9 pp.  
GERMAN, per, Zeitschrift fur Naturforschung, Vol 22A, No 2, 1967, pp 278-280.  
P911042568  
AEC NP-TR-1605

The Plasma Jet as a New Light Source and Emission Spectral Analysis Using a Plasma Torch, by Hidehiro Goto, Iruo Atsuya, 22 pp.  
JAPANESE, per, Rinsen Kagaku, Vol 16, 1967, pp 735-747.  
P911044868  
AEC ORNL-TN-1826

Scientific  
Physics (Contd)

Exact Title Unknown - Pertains to Quaternisation of Pyridine.  
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 68, No 3 1965, pp 504-506.  
\*ACSI J-4281  
ID 2204003468

The Measurement of Spectra and Correlation Functions of Transient Random Signals, by H. R. Loos.  
POLISH, per, IMEKO-IV, Warszawa, No 3-8-VII-1967, 25 pp.  
\*FTD-HT-23-168-68

Propulsion & Fuels

Fast Boiling Reactors with Fuel in the Form of a Molten Salt, by Mechislav Taube, 7 pp.  
RUSSIAN, per, Atomaya Energiya, Vol 22, Issue No 1, Jan 1967, pp 10-13. P500025668  
Dept of Navy/NIC Tr No 2361

Ignition Lags of Hydrocarbon Fuels at High Temperature, by V. M. Zimont & Yu. L. Trushin.  
RUSSIAN, per, Fiz. Goreniya i Vzryva, Vol 3, No 1, 1967, pp 86-93.  
\*Dept of Navy/APL/JHU J-1137

Domestic Gas Pipeline Transport Developments, by Yu. I. Bokserman, 7 pp.  
RUSSIAN, per, Gazovaya Promyshlennost', No 10, 1967, pp 9-13.  
JPRS 44079

Study of the Initial Section of Turbulent Jets of Various Gases in a Wake Flow of Air, by G. N. Abramovich.  
RUSSIAN, per, AN SSSR, Izv., Mekh. Zhidkosti i Gaza, No 6, 1966, pp 166-172.  
Dept of Navy/APL/JHU T-2097

Analysis of the Work of a Turbojet Engine with Thrust Reversal by the Method of Small Deviations, by A. S. Tikhonov, 10 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy. Aviatsionnaya Tekhnika, 1965, No 1, pp 78-86.  
P100029868-V  
FTD-MT-65-72



Scientific  
Propulsion & Fuels (Contd)

Residual Oils of Higher Viscosity, by P. A. Zelotarev, 5 pp.  
RUSSIAN, per, Neftepererabotka i Neftekhimiya, No 5, 1965, pp 3-6. P100029668  
FTD-HT-66-578

Turbulent Nonisothermal Jets of a Compressible Gas of Variable Composition, by A. S. Ginevskii.  
RUSSIAN, per, Promyshlennaya Aerodinamika, No 27, 1966, pp 31-54.  
Dept of Navy/APL/JHU TG 230-T538

Antisurge Regulator, by A.I. Pryadilov, 3 pp.  
RUSSIAN, patent, Patent No. 178012 (Appl. No. 770869/25-8, March 19, 1962), 2 pp.  
P100007468  
FTD-HT-23-954-67

Acceptance Tests for Stopper Heads and Nozzles, by M. Moray.  
FRENCH, per, C.D.S Circ., No. 4, 1967, pp. 1011-1030.  
\*BISI 6099

The Douroux Rotary Engine, by E. M. Douroux.  
FRENCH, Patent No. 1,251,954.  
USAFSTC P200031468  
FSTC-HT-23-4-68

Electromagnetic Generation of Plane Pressure Pulses in Fluids, by W. Eisenmenger.  
GERMAN, per, Acustica, Vol 1, 1962, pp 185-202.  
NSTIC Trans No 1680 P944024668

Conversion of the Frankfurt/Oder Oil Cracking Facility to Liquid Gas Use, by Bodo Wolf and Heins Martin, 11 pp.  
GERMAN, per, Energiotechnik, Vol 17, No 11, Nov 1967, pp 481-484.  
JPRS 44060

Examination of Inter-element Effects as Function of Sparking-Off Time, by G. Herberg, et al.  
GERMAN, per, Spectrochimica Acta., Vol. 23B, 1967, Sept., pp. 101-116.  
\*BISI 6102

Pulsejet, Jet and Rocket Engines, by Stanislaw Wojcicki, 334 pp.  
POLISH, bk, Ministerstwo Obrony Narodowej, 1962, pp 1-299. P100039468-V  
FTD-TT-64-991

Scientific  
Space Technology

General Perturbations of the Elements of Artificial Lunar Satellites, by V. A. Brumberg, 37 pp.  
RUSSIAN, per, Bulleten' Instituta Teoreticheskoy Astronomii, Vol VIII, No 10 (103), 1962, pp 705-732. P500018968  
Dept of Navy/NIC Trans No 2492

Three-Dimensional Lunar Trajectories, by V. A. Yegorov.  
RUSSIAN, bk, Prostranstvennaya zadacha dostizheniya luny, Moscow, Izdatel'stvo "Nauka", 1965, 222 1/2 pp.  
\*CSFTI TT 68-50306

Handbook on Cosmonautics.  
RUSSIAN, bk, Spravochnik po kosmonavtike, Moscow, Voennoye Izdatel'stvo Ministerstva Oborony SSSR, 1966, 329 pp.  
\*CSFTI TT 68-50304

The ABC of Outer-Space Piloting, by I. Merkulov, 10 pp.  
RUSSIAN, per, Tekhnika - Molodezhi, No 1, 1966, pp 20-23. P100020668  
FTD-HT-23-891-67

Scientific Session on Astronautics Held in Budapest, by Andras Szentesi, 7 pp.  
HUNGARIAN, per, Geodesia es Kartografia, Vol 19, No 6, 1967, pp 461-464.  
JPRS 44103

Miscellaneous

Adaptation to Extreme Effects in Experimental Environments, by P. K. Isakov.  
RUSSIAN.  
\*ACSI J-4288  
ID 2204003668

Collected Works of Academician A. M. Lyapunov, Vol II, by A. M. Lyapunov, 463 pp.  
RUSSIAN, bk, Akademik A. M. Lyapunov, Sobraniye Sochineniy (II), 1956, pp 1-473.  
P100030268-V  
FTD-MT-64-209

Scientific  
Miscellaneous (Contd)

Azerbaydahan Academy of Sciences Elects New Members, by R.G. Ismaylov, 6 pp.  
RUSSIAN, newspaper, Bakinskiy Rabochiy, Baku, 29 Dec 67, p. 3.  
JPRS 44,193

State Standard for Articles from Black Powder.  
5 pp.  
RUSSIAN, per, Izdeliya Pressovanyye Iz Dymnogo Ruzheynogo Porokha Gost 6760-58, Jan 1959.  
ACSI J-4067  
ID 1771093267

Scientific Achievements of State Prize Winners Prof. Tat'yana Vinogradova and Prof. Arseniy Rusakov, by V. Petrova, 3 pp.  
RUSSIAN, newspaper, Meditinskaya Gazeta, Moscow, 1 Jan 68, p. 3.  
JPRS 44,224

Fawn, by B. Savitskii.  
RUSSIAN, per, Pyzhik. -- Okhotnichi Prostory, Vol 15, 1960, pp 210-212.  
\*CSFTI TT 68-50392

The "Inprodmash-67" Exhibition.  
RUSSIAN, per, Rybnoe Khoz, Vol 43, No 9, 1967, pp 90.  
\*Dept of Interior  
Bureau of Commerical Fisheries  
Branch of Foreign Fisheries

The Crisis of Scientific Research, by 'Abbas Mabruk, 14 pp.  
ARABIC, newspaper, al-Ahram, Cairo, 10 and 11 Jan 68.  
JPRS 44,329

Untying the Prague Knot.  
CZECH, per, Zelexnicar, 29 Apr 1967, pp 2-3.  
DIA LN276-68

Information Bulletin, No 15, June 1964, 57 pp.  
FRENCH, rpt.  
P500025968-V  
Dept of Navy/NIC Trans 2507

Information Bulletin, No 17, June 1965, 98 pp.  
FRENCH, rpt.  
P500026168-V  
Dept of Navy/NIC Trans No 2508

Scientific  
Miscellaneous

Information Bulletin No 20, December 1966, 32 pp.  
FRENCH, rpt.  
P500026368-V  
Dept of Navy/NIC Trans No 2509

The Redoutable, 12 pp.  
FRENCH, per, 1967. P500024768  
Dept of Navy/NIC Tr No 2491

The Plain of Reeds, by Victor Delahaye, 248 pp.  
FRENCH, bk, La Plaine des Joncs (Indochine Francaise) et sa Mise en Valeur, 1928.  
\*ACSI J-4236  
ID 2204002468

List of Contracts for Planned Projects.  
FRENCH, per, Le Progres Scientifique, No 109, June 1967, pp 54-60, 69-70.  
\*ACSI J-4307  
ID 2832022167

News Reports, 2 pp.  
ITALIAN, 9 Sep 1967.  
ACSI J-4120  
ID 2204000968

Speech by Vice Prime Minister at the Building Materials Conference, by Eugeniusz Szyr, 6 pp.  
POLISH, monthly, Cement-Wapno-Gips, No. 9-10, Warsaw, Sept-Oct 67, pp. 262-264.  
JPRS 44,285

General Report of the Minister of Building and Building Materials, by Marian Olewinski, 14 pp.  
POLISH, monthly publ., Cement-Wapno-Gips, Nos 9-10, Warsaw, Sept-Oct, 67, pp. 264-269.  
JPRS 44,285

Multilateral Cooperation in Global Geophysical Research, by Witold Krzeminski, 5 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 70-72.  
JPRS 44061

Work of the Pan Qualification Committee, by Anastasja Strus, 6 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 103-106.  
JPRS 44061

Scientific  
Miscellaneous (Contd)

Plan Activities from 1 April 1967 to 30 June  
1967, 68 pp.  
POLISH, per, Nauka Polska, No 5, 1967, pp 107-  
145.  
JPRS 44061

Polish Patents - Calendar Year 1968.  
POLISH Patents, 1968.  
\*CSFTI TT 68-50012

Meeting of the "Rudjer Boskovic" Astronomical  
Society, by Nenad Jankovic, 3 pp.  
SERBO-CROATIAN, journal, Vasiona, No. 2,  
Belgrade, 1967, pp. 40-41.  
JPRS 44,181

Goals of Academy of Science Outlined, by  
Antonio Nunez Jimenez, 11 pp.  
SPANISH, newspaper, Granma, Havana, 2 Jan 68,  
p. 2.  
JPRS 44,306

Information Manual, of Various Articles by A.  
Berrando, Andres I. Flores, 71 pp.  
SPANISH, per, Manual de Informaciones, Vol 6,  
No 3/4, 1964, pp 2-15; 36-60; 62-90; 92-112; 114-  
119.  
ACSI I-6925  
ID 2804000765

Speech at the International Congress of Bottling,  
SPANISH, per, IDF (Informacion de Envase)  
Embalaje y Artes Graficas Aplicadas, No 101, Jan  
1968, pp 20-21.  
\*ACSI J-4407  
ID 2204007068

Educational Travel, 7 pp.  
SWEDISH, per, Svensk Intendentur Tidskrift, No  
9, 1967, pp 267-273.  
ACSI J-3941  
ID 2204059967

Warmest Congratulations to Venus IV the Brill-  
iant Result of Soviet Science and Technology,  
by Ta Quang Buu, 10 pp.  
VIETNAMESE, per, Hoc Tap, Hanoi, No. 12,  
Dec 67, pp. 81-88.  
JPRS 44,391

Annotated Bibliography of Foreign Literature.  
LANGUAGE UNKNOWN, bk, Survey No 4, 1967, 360 pp.  
\*CSFTI TT 68-50451

ON COVER-TO-COVER TRANSLATIONS

Acta Medica Iugoslavica, Vol 20, No 3, 1966.  
CFSTI TT 66-59007-3

Arhiv za Poljoprivredne Nauke, Vol 20,  
No 68, 1967.  
CFSTI TT 67-58019-1

Arhiv za Poljoprivredne Nauke, Vol 20,  
No 69, 1967.  
CFSTI TT 67-58019-2

Arhiv za Poljoprivredne Nauke, Vol 21, 1968.  
\*CFSTI TT 68-50057

Bilten Instituta za Nuklearne Nauke Boris  
Kidric, Vol 19, 1968,  
\*CFSTI TT 68-50055  
\*AEC-tr-6884

Biokhimiya, Vol 32, No. 2, Part 1, March-April 1967.  
CB

Biokhimiya, Vol 32, No 2, Part 2, Mar-Apr 1967.  
CB

Biokhimiya, Vol 32, No 3, Part 1, May-Jun 1967.  
CB

Byulleten Izobret, October 1967, Section I-Chemical.  
Derwent Publications LTD

Byulleten Izobret, October 1967, Section II-  
Electrical.  
Derwent Publications LTD

Casopis Ornitoloski Zavod, Vol 19, 1965.  
\*CFSTI TT 68-50064

Doklady Akademii Nauk SSSR, Vol 175, No 1-6,  
Jul-Aug 1967.  
CB

Doklady AN SSSR, Vol 175, No 4-6, Aug 1967.  
Am Inst Phys  
Vol 12, No 8, Feb 1968

Doklady Ak Nauk SSSR, Vol 176, No 1-3, Sept 1967.  
Am Inst Phys  
Vol 12, No 9, March 1968

Elektrokhimiya, Vol 3, No. 8, Aug 1967.  
CB

Elektrosvyaz, Vol 21, No 9, 1967.  
IEEE

Fizika Tverdogo Tela, Vol 9, No 8, Aug 1968.  
Am Inst Phys  
Vol 9, No 8, Feb 1968

Fizika Tverdogo Tela, Vol 9, No 9, 1967.  
Am Inst Phys  
Vol 9, No 9, March 1968

Fiziologiya Rastenii, Vol 14, No. 5, Sept-Oct 1967.  
CB

Geodeziya i Kartografiya, No 3, 1967.  
Am Geophysical Union

Geokhimiya, Vol 3, No. 6, 1966.  
American Geological Institute

Geologiya Nefti i Gaza, Vol 7, No 4, 1963.  
Petroleum Geology

Gigiena i Sanitariya, Vol 30, No 10-12, Oct-Dec  
1965.  
CFSTI TT 66-51033-4

Glasnik Hemijskog Drustva - Beograd, Vol 31,  
No 3, 1966.  
CFSTI TT 66-59000-3

Glasnik Hemijskog Drustva - Beograd, Vol 33,  
1968.  
\*CFSTI TT 68-50056

Izvestiya AN SSSR, Atmosfery i Kosmologicheskaya,  
Vol 3, No 7, 1967.  
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Fizika Zemli,  
No 6, 1967.  
Am Geophysical Union

Izvestiya Akademii Nauk SSSR, Ser Fiz, Vol 31, No. 3,  
March 1967.  
Columbia Technical Translations

Izvestiya VUZ Radiotekhnika, Vol 9, No 2, Mar-Apr  
1966.  
Faraday Press

Izvestiya VUZ Radiotekhnika, Vol 9, No 3,  
May-Jun 1966.  
Faraday Press

Kosmicheskaya Biologiya i Meditsina, Vol 1,  
No 5, 1967.  
JPRS 44299

Kristallografiya, Vol 12, No 4, Jul-Aug 1967.  
Am Inst Phys  
Vol 12, No 4, Jan-Feb 1968

Lijecnicki Vjesnik, Vol 89, No 2, 1967.  
CFSTI TT 67-58020-2

Lijecnicki Vjesnik, Vol 89, No 3, 1967.  
CFSTI TT 67-58020-3

Lijecnicki Vjesnik, Vol 89, No 4, 1967.  
CFSTI TT 67-58020-4

Lijecnicki Vjesnik, Vol 89, No 5, 1967.  
CFSTI TT 67-58020-5

Lijecnicki Vjesnik, Vol 89, No 6, 1967.  
CFSTI TT 67-58020-6

Nukleonika, Vol 11, No 11-12, 1966.  
AEC-tr-6657, 6658

Nukleonika, Vol 13, 1968.  
\*CFSTI TT 68-50011  
\*AEC-tr-6931

Polski Przegląd Radiologii i Medycyny Nuklearnej,  
Vol 31, No 1, 1967.  
CFSTI TT 67-56003-1

Polski Przegląd Radiologii i Medycyny Nuklearnej,  
Vol 31, No 3, 1967.  
CFSTI TT 67-56003-3

Problemy Peredachi Informatsiy, Vol 3, No 4,  
1967.  
JPRS 44644

Radiobiologiya, Vol 6, No 6, 1966.  
AEC-tr-6775  
P911064568-V

Radiotekhnika, Vol 22, No 9, 1967.  
IEEE

Radiotekhnika i Elektronika, No 8, 1967.  
IEEE

Radiotekhnika i Elektronika, No 9, 1967.  
IEEE

Rudarsko-Metalurski Zbornik, 1968.  
\*CFSTI TT 68-50059

Saopstenja Institut za Vodoprivredu Jaroslav  
Cerni, Vol 15, 1968.  
\*CFSTI TT 68-50060

Saopstenja, Vol XIV, No 40, 1967.  
CFSTI TT 67-58016-1

Savremena Poljoprivreda, Vol 14, No 7-8, 1966.  
CFSTI TT 67-58007/7-8

Savremena Poljoprivreda, Vol 14, No 9, 1966.  
CFSTI TT 67-58007-9

Savremena Poljoprivreda, Vol 14, No 10, 1966.  
CFSTI TT 67-58007-10

Savremena Poljoprivreda, Vol 15, No 1, 1967.  
CFSTI TT 67-58014-1

Savremena Poljoprivreda, Vol 15, No 2, 1967.  
CFSTI TT 67-58014-2

Savremena Poljoprivreda, Vol 16, 1968.  
\*CFSTI TT 68-50058

Tekhnika i Yuzhisheniye, No 10, 1967.  
ACSI J-3837

Tsvetnye Metally, Vol 39, No 8, Sept 1966.  
Primary Sources  
Vol 7, No 9, 1966

Tyl i Snabzheniye, No 11, 1967,  
ACSI J-3978

Tyl i Snabzheniye, No 12, 1967.  
ACSI J-4132

Tyl i Snabzheniye, No 1, 1968.  
\*ACSI J-4396

Ukrainskiy Fizicheskiy Zhurnal, Vol 12, No 1,  
Jan 1967.  
Israel Program for Scientific Translations

Uspekhi Fizicheskikh Nauk, Vol 92, Nos. 1 and 2,  
Nov-Dec 1967.  
American Institute of Physics  
Vol 10, No. 3, Nov-Dec 1967

Vestnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja, Geologija, No 25, 1968.  
\*CFSTI TT 68-50061

Vestnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja. Serija B. Inzenjerska Geologija i  
Hidrogeologija, No 8, 1968.  
\*CFSTI TT 68-50062

Vestnik Zavod za Geoloska i Geofizicka Istrazi-  
vanja. Serija C. Primenjena Geofizika, No 9,  
1968.  
\*CFSTI TT 68-50063

Vestnik Akademii Nauk SSSR, Vol 37, No 11, 1967.  
JPRS 44643

Vestnik Protivovozdushnoy Oborony, No 9, 1967,  
ACSI J-3547

Vestnik Protivovozdushnoy Oborony, No 1, 1968.  
\*ACSI J-4394

Voyenno Meditsinskiy Zhurnal, No 9, 1967.  
ACSI J-3648

Voyenno Meditsinskiy Zhurnal, No 9, 1967.  
ACSI J-4119

Voyenno Meditsinskiy Zhurnal, No 9, 1967.  
\*ACSI J-4395

Voyennyy Vestnik, No 9, 1967.  
ACSI J-3534

Voyennyy Vestnik, No 10, 1967.  
ACSI J-3836

Voyennyy Vestnik, No 11, 1967.  
ACSI J-4015

Yadernaya Fizika, Vol 5, No. 6, Dec 1967.  
American Institute of Physics  
Vol 5, No. 6, June 1967

Zhurnal Eksperimental'noi i Teoreticheskoi  
Fiziki, Vol 53, No 1, July 1967.  
Am Inst Phys  
Vol 26, No 1, 1968

Zhurnal Tekhnicheskoy Fiziki, Vol 37, No 9, 1967.  
Am Inst Phys  
Vol 12, No 9, March 1968

Zhurnal Prikladnoy Khimii, Vol 40, No. 5, May 1967.  
CB

# TABLE OF CONTENTS

<i>D. Blatnik</i> A Simplified Micromethod for Performing Chromosome Preparations from Peripheral Blood . . . . .	5
<i>M. Kičić, D. Milanović, I. Palmar, and O. Jelačić:</i> Serious Hypoglycemia Caused by a Tumor of the Thoracic Cavity . . . . .	9
<i>R. S. Mičić, S. Janež, R. Debijadji, and M. Stefanović:</i> Paroxysmal Edema of the Thyroid Gland Caused by Pheochromocytoma . . . . .	17
<i>A. Kostić, K. Barjaktarević-Nikolić, M. Petrović, and A. Milosavljević:</i> Clinical and EEG Studies of Typhoid Encephalitis . . . . .	25
<i>V. Karadžić:</i> Effect of Raised Levels of Gamma-Aminobutyric Acid in the Central Nervous System on Sleep Phases in the Cat . . . . .	37
<i>B. Rotović, O. Bugarski, R. Živković, R. Vlainić, M. Japundžić, and I. Kulić-Japundžić:</i> The Relation of Quantitative Variations of Phosphoprotein Phosphorus to the Mitotic Activity of Hepatocytes after Partial Hepatectomy . . . . .	45
<i>M. Ivić, V. Karadžić, D. Petković, and O. Kostić:</i> Adrenalin Effects on the Heart of a Guinea-pig Treated with Small Doses of Desoxycorticosterone . . . . .	51
<i>D. Koraćević:</i> Transamination During Immunisation . . . . .	65
<i>A. Kansky:</i> Incidence of <i>Porphyrria Cutanea Tarda</i> in Yugoslavia . . . . .	69
<i>Dj. Skerović, M. Cvetković, V. Mujović, and J. Vojvodić:</i> Influence of Hydrocortisone on the Quantity and Concentration of RNA in the Spleen of Guinea-pigs During Sensitization . . . . .	73

Available From CFSTI TT 66-59007-3

# CONTENTS

	Page
Sarić, O. and Batinica D.: <i>Hay Quality on Farms in Bosnia and Herzegovina . . . . .</i>	5
Mišić, P. D. and Gavrilović M.: <i>A study on the Relationship between Malling Rootstocks and Some Apple Varieties . . . . .</i>	17
Suput, M., Mitrović A. and Vuksanović S.: <i>Effect of Fertilization and Crop Density on Soybean Yield . . . . .</i>	29
Vernazza, N.: <i>Contribution to the Study of Lavender Oil — Oleum lavandulae . . . . .</i>	37
Sinžar, B.: <i>A study of Weeds in Corn in Southern Banat . . . . .</i>	45
Janda, Lj.: <i>The Suitability of Certain Varieties of Plums for Drying . . . . .</i>	59
Filipović, Đ. and Antonović G.: <i>Eastern Serbia's Terra Rossa . . . . .</i>	71
Hadžistević, D.: <i>Evaluation of the Resistance of Yugoslav Corn Hybrids to the European Corn Borer (Ostrinia nubilalis Hbn.) . . . . .</i>	83
Tošić, M., and Simova D.: <i>Infection Chain of Maize Mosaic Virus . . . . .</i>	89
Bačwanski S., Obračević C., Milovančev S., and Vučetić S.: <i>Effect of Green Feed in Fattening Young Cattle . . . . .</i>	93
Pavličević, A. and Zeremski D.: <i>The Effect of Feeding on the Growth of F<sub>1</sub> Simmental x Dutch-Frisian Calves . . . . .</i>	101
Srečković A., Gajić Ž., and Bokorov T.: <i>Influence of the Level of Food Intake during Lactation on the Live-Weight and Reproductive Performance of Sows . . . . .</i>	109
Ranković P., Anastasijević V., and Mrdjenović P.: <i>Effect of Heterosis on the Productivity of Porkers Produced by Crossing the Large White and the Dutch Landrace . . . . .</i>	119
Ceranić, V.: <i>Effect of Twinning on Milk Yield in Domestic Merino Sheep . . . . .</i>	127
Reviews . . . . .	139

Available From CFSTI TT 67-58019-1



# CONTENTS

	Page
Stojković, L.: Single Crop and Weather Conditions in Corn Growing . . . . .	5
Bulatović, S. and Rahović, D.: Regenerative Ability of Frost-Damaged Peach Trees — Moretini I and Late I. H. Hale Varieties . . . . .	15
Mišić, D. P., Bugarčić, Ž. V., and Tešić, B. M.: 45/7 — a New Variety of Strawberry . . . . .	25
Vojinović, Ž.: Effect of Molybdenum on Alfalfa Development and Symbiotic Nitrogen Fixation . . . . .	33
Mitrović, A.: Phases of Development of Some Important Soybean Varieties . . . . .	39
Cupina, A. and Sarić, M.: Assimilation of Carbon into Some Organic Matters in Young Corn Plants Grown under Various Conditions of Nutrition . . . . .	47
Kojić, M. and Cincović, T.: Contribution to the Study of Photosynthesis Productivity of Some High Yield Types of Wheat in Field Conditions . . . . .	59
Antonović, M. G.: Erosion and Measures for the Protection of Soil on Red Sandstones in East Serbia . . . . .	65
Belić, J., Ognjanović, A., and Gajić, Ž.: Acclimatization of Large White Pigs to Conditions of North Banat . . . . .	73
Nikolić, D., Milošić, M., and Lazarević, Lj.: The Reproductive Performance of the Improved Dutch Large Pig (Dutch Landrace) in Yugoslav Conditions . . . . .	89
Belić, J., Mitić, N., and Vidanović, M.: Meat Production of the First Cross Progeny of Pirot Sheep and Me- rino-Arles Rams . . . . .	105
Mitić, N., Kostić, V., Bešlić, R., and Zeremski, D.: Production of Oestrus and Insemination of Ewes during Lactation for the Purpose of Improving Their Reproductive Performance . . . . .	121
Kostić, V.: The Effect of Crossing Surljig Ewes and Corridall Rams on Important Characteristics of the Reproductive Performance of the Crosses Pro- duced . . . . .	131
Reviews . . . . .	143

Available From CFSTI TT 67-58019-2

## CONTENTS

	Engl./Russ.
Vatslav Leonovich Kretovich (on the Occasion of His 60th Birthday) . . . . .	165 203
Hydrolysis of Seryl Pyrophosphates by Yeast Inorganic Pyrophosphatase —S. M. Avaeva, S. N. Kara-Murza, and M. M. Botvinik . . . . .	167 205
Fatty-Acid Composition of the Lipids of the Plague Bacterium—E. K. Alimova and E. A. Boikova . . . . .	171 210
Determination of the Ionization Constants of the Functional Groups of the Active Center of Pepsin—N. G. Lutsenko, L. M. Ginodman, and V. N. Orekhovich . . . . .	182 223
On the Mechanism of the Action of Antifungal Polyenic Antibiotics upon Alcohol Fermentation in Yeasts—A. N. Klimov and V. N. Litvinova . . . . .	186 228
Participation of Acetol Phosphate in Photo-Phosphorylation in Pea Chloroplasts —A. A. Yasnikov, N. V. Volkova, B. N. Bernshtein, A. S. Okanenko, and T. A. Reingard . . . . .	191 234
Isolation of Phosphomonoesterase Preparations Applicable to Studies of the Primary Structure of Nucleic Acids—N. M. Abrosimova-Amel'yanchik, V. D. Aksel'rod, and R. I. Tatarskaya . . . . .	196 240
Free Amino Acids of the Fibroin and Sericin Portions of the Silk Gland of the Mulberry Silkworm—Yu. B. Filippovich and S. M. Klunova . . . . .	202 248
Influence of Culturing Conditions on the Metabolism of Inorganic Polyphosphates and Certain other Phosphorus Compounds, in <i>Scenedesmus obliquus</i> —I. S. Kulaev and V. M. Vagabov . . . . .	207 253
Kinetics of the Hydrolysis of Sodium p-Nitro-Phenylphosphate by Alkaline Phosphatase —A. P. Brestkin, E. B. Nikol'skaya, and N. B. Karpenko . . . . .	214 261
The Participation of ATP in the Motor Function of the Infusoria <i>Tetrahymena</i> <i>pyriformis</i> —S. A. Burnasheva and T. P. Karausheva . . . . .	222 270
Identification of Divalent Iron Complexes with Cysteine in Biological Systems by the EPR Method—A. F. Vanin . . . . .	228 277
Synthesis of a Substance of Adrenocorticotropic Nature Induced in a Cell-Free System of <i>Escherichia coli</i> by Messenger RNA from Bovine Adenohypophyses —I. N. Todorov, V. N. Vasil'chenko, G. A. Pankova, L. M. Nabutovskaya, A. A. Livshits, E. S. Manshelei, and E. S. Vasil'eva . . . . .	233 283
Causes of the Effect of pH on Cholinesterase Activity—V. A. Yakovlev and R. S. Agabekyan . . . . .	243 293
Interaction between Nucleic Acids, Histones, and other Proteins in Agarose —A. E. Gurvich, S. I. Gorodetskii, and E. V. Sidorova . . . . .	251 302

The Russian press date (podpisano k pechatu) of this issue was 3/29/1967.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

# BIOCHEMISTRY

A translation of *Biokhimiya*

Volume 32, Number 2, Part 2

March-April, 1967

## CONTENTS

	Engl./Russ.
Further Studies of Diols, Isolated from Lipids of Yeasts from the Genus <i>Lipomyces</i> — V. A. Vaver, N. V. Prokazova, A. N. Ushakov, L. S. Golovkina, and L. D. Bergel'son . . . . .	257 310
Effect of Erythrocyte Age on Location of the Soret Band of Hemoglobin and on Methemoglobin and on Methemoglobin Formation — L. É. Gorn . . . . .	263 318
The Nucleotide Composition of RNA from Human Leukocytes — M. N. Blinov . . . . .	267 323
Acid-Soluble Compounds in <i>Clostridium perfringens</i> — I. P. Malorova and V. A. Blagoveshchenskii . . . . .	272 329
Glucogalactans from <i>Sporobolomuces roseus</i> — N. P. Elinov and G. A. Vitovskaya . . . . .	279 337
Effect of Salts on Serum Cholinesterase Activity — T. A. Fruentova . . . . .	283 341
Cleavage of the Dog Haptoglobin Molecule into Its Component Polypeptide Chains — V. D. Uspenskaya, M. V. Pleskova, and M. I. Nedelyaeva . . . . .	288 347
Purification of Kininogen (Bradykininogen) from Rabbit's Blood Plasma and the Study of Its Properties — T. P. Egorova and T. S. Paskhina . . . . .	294 354
Glutaminase and Isoglutaminase of <i>Saccharomyces cerevisiae</i> Meyen KMY 381 — A. Kh. Abdumalikov and V. V. Eremenko . . . . .	302 363
Hydrolysis of Glucomannans by an Enzyme Preparation from <i>Aspergillus oryzae</i> — A. A. Kuznetsov and B. N. Stepanenko . . . . .	306 368
Separation of Pyrimidine Desoxyribonucleotides by DEAE-Sephadex Chromatography — A. L. Mazin and B. F. Vanyushin . . . . .	313 377
Mechanism of Function of Ubiquinone in Mitochondria — L. M. Raikhman and L. A. Blyumenfel'd . . . . .	322 388
Preparation of Highly Purified Diamine Oxidase from Pig Kidneys — E. V. Goryachenkova, L. I. Shcherbatyuk, and E. A. Voronina . . . . .	330 398
Study of $\gamma$ -Irradiated Ribonuclease by the Method of Gel Filtration — V. I. Maksimov, V. I. Osipov, and E. D. Kaverzneva . . . . .	334 403
Nature of Reduced Forms of Chlorophyll — A. P. Losev and G. P. Gurinovich . . . . .	339 409
Phosphofructokinase Activity and Regulation of the Pasteur Effect during Early Embryogenesis — L. S. Mil'man and Yu. G. Yurovitskii . . . . .	344 416

The Russian press date (podpisano k pechatl) of this issue was 3/29/1967. Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

# BIOCHEMISTRY

A translation of *Biokhimiya*

Volume 32, Number 3, Part 1

May-June, 1967

## CONTENTS

	Engl./Russ.
Mass Spectrometric Determination of the Amino Acid Sequence in Peptides and Proteins — Yu.A. Ovchinnikov, A.A. Kryushkin, E.I. Vinogradova, B.V. Rozyanov, and M.M. Shemyakin .....	351 427
Acceptor Activity of Dextrin-4-Glycosyltransferase and Spectroscopic Studies of Its Preparations — A.N. Petrova and A.A. Kobzeva .....	360 439
Conversions of Labeled Acetic Acid in the Course of Its Uptake by Bean Leaves from the Atmosphere — N.G. Doman and M.M. Kydar .....	365 445
Nucleotide Composition of DNA Fractions of Bone Marrow in Normal and X-Irradiated Animals — G.A. Kritskii, I.A. Arends, and Yu.V. Nikolaev .....	372 452
Effect of Lecithin on the Activity of Certain Enzymes of Rabbit Muscle Myofibrils and Mitochondria — D.L. Ferdman, S.F. Épshtein, and O.L. Sanina .....	377 458
Analysis of Labeled Orotic Acid Metabolite Excretion as a Means of Studying the Metabolism of Nuclear Compounds — O. Ya. Tereschenko .....	380 462
Effect of Formaldehyde on Some Properties of Desoxyribonucleoprotein — Yu.A. Romakov and G.V. Bozhko .....	388 471
Isolation and Partial Characterization of Glutamate Decarboxylase from Various Strains of <i>Escherichia coli</i> — S.V. Likholetova .....	393 477
A Study of the Specificity of Hydrolytic Enzyme Formed by <i>Bacillus mycoides</i> HB — S.V. El'chits and M.M. Levitov .....	397 481
Isolation and Physicochemical Properties of Phosphorylase from Bovine Skeletal Muscles — A.D. Morozkin and V. N. Orekhovich .....	401 487
Detection of Polyphosphate Glucokinase in Various Microorganisms — O. Szymona, S.O. Uryson, and I.S. Kulaev .....	408 495
Gangliosides of the Brain during Stimulation of the Central Nervous System — Ya.A. Épshtein and A.M. Maksimova .....	416 504
Selective Inhibition of the Enzymatic Deamination of Serotonin by Harmine and Related Tricyclic Compounds — V.Z. Gorkin, L.V. Tat'yanenko, D.M. Krasnokutskaya, E.V. Pronina, and L.N. Yakhontov .....	421 516
Removal of Chloroplast Fragments from Preparations of Pea Seedling Mitochondria by Density Gradient Centrifugation — V.Ya. Kalacheva, B.É. Kirshteine, V.I. Biryuzova, L.I. Kostycheva, and N.M. Sisakyan .....	429 520
Cleavage of Dipeptide Analogues of Bradykinin by Kininase (Carboxypeptidase N) from Human and Rabbit Serum — T.S. Paskhina and S.S. Trapeznikova .....	435 527
Some Characteristics of Fructose Diphosphatase from Loach Embryo — Yu.G. Yurovitskii and L.S. Mu'man .....	441 534

The Russian press date (podpisano k pechat') of this issue was 5/30/1967. Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available From Consultants Bureau

# DOKLADY PHYSICAL CHEMISTRY

A translation of the Physical Chemistry Section of *Doklady Akademii Nauk SSSR*

Volume 175, Numbers 1-6

July-August, 1967

## CONTENTS

	Engl./Russ.
Molecular Interaction of HF and DF in Solutions According to Nuclear Magnetic Resonance Data - P. M. Borodin and E. N. Sventitskii . . . . .	473 101
IR Spectroscopic Study of the Chemisorption and Reactivity of Acetone-Oxygen Mixtures on Nickel Oxide - A. A. Kadushin, Yu. N. Rufov, and S. Z. Roginski . . . . .	477 105
The Properties of Detonation in Some Heterogeneous Systems - V. F. Komov and Ya. K. Troshin . .	480 109
Microanalysis of Amino Acids by Ion Mobility - Academician B. P. Konstantinov and O. V. Oshurkova . . . . .	484 113
Thermodynamic Properties of the Critical Phase in Dilute Binary Solutions - L. R. Krichevskii and L. A. Makarevich . . . . .	488 117
Asymptotic Behavior of the Pressure Tensor in a Liquid Surface Layer - F. M. Kuni and A. I. Rusanov	492 121
Formation of the Area of Actual Contact of Highly Elastic Polymers under Load - V. V. Lavrent'ev	495 125
Mechanism of Urethane Formation from Phenylisocyanate and Methyl Alcohol in the Presence of Metal Acetylacetonates - T. É. Lipatova and Yu. N. Nizel'skii . . . . .	498 128
Statistical-Thermodynamic Method of Calculating Activities in Multicomponent Solid Solutions - A. N. Men', Yu. N. Kurashin, M. G. Zhuravleva, and G. I. Chufarov . . . . .	502 132
Thermal Rearrangement of 1,1,3,3,5,5,7,7-Octamethyl-2,6-Dioxo-1,3,5,7-Tetraazacyclooctane - N. S. Nametkin, L. E. Gusel'nikov, T. Kh. Islamov, M. V. Shishkina, and V. M. Vdovin	506 136
Some Features of the Dissolution of Oxides Possessing Semiconductor Properties - L. N. Plaksin, Yu. N. Matveev, B. Ya. Poltavtsev, and L. V. Storozhev . . . . .	510 140
Vibrational Spectra and Rotational Isomerism of Trans-1,4-Dihalogeno Derivatives of Cyclohexane - A. B. Remizov and L. M. Sverdlov . . . . .	513 144
Cathodic Ionization of Oxygen on a Continuously Renewed Palladium Surface - N. D. Tomashov, N. M. Strukov, and L. P. Vershinina . . . . .	516 148
Theory of Acoustic Vibrations in the Combustion of a Solid - K. L. Shchelkin . . . . .	519 152
Electron Paramagnetic Resonance of the Triplet Excited State of a Series of Porphyrins - Z. P. Gribova, L. P. Kayushin, and V. A. Umrikhin . . . . .	523 378
Hydrogenation of Methyl Ethyl Ketone on Type X Nickel Zeolites - Z. V. Gryaznova, Academician A. A. Balandin, Z. F. Glotova, G. V. Tsitsishvili, T. G. Andronikashvili, and A. Yu. Krupennikova . . . . .	526 381
Thermodynamic Characteristics of the Boundary Phase-Bulk Phase Transition of Nitrobenzene - B. V. Deryagin and Yu. M. Popovskii . . . . .	530 385
Determination of the Activation Energy of Hydrogen Abstraction by Hot and Thermal Ethyl Radicals in the Photolysis of HI-C <sub>2</sub> H <sub>4</sub> Mixtures - B. G. Dzantiev and A. P. Shvedchikov . . .	534 389
Transition Temperatures of Polyethyleneterephthalate Studied by Comparing Thermoluminescence with Linear Dilatometry and Thermomechanics - P. V. Koslov, L. F. Kalinin', and Z. Z. Galais . . . . .	537 392
Contribution to the Theory of the Expanding Boundary in Sedimentation Analysis of Polymers - L. Ya. Poddubnyi and V. A. Grechanovskii . . . . .	540 396

(Contd)

Available From Consultants Bureau

	Engl./Russ.
Characteristics of Some Cryptoheterogeneous Materials - G. M. Sinityna, I. N. Vlodavets, and Academician P. A. Rebinder. . . . .	543 399
Equation Describing the Component Distribution after One Passage of a Molten Zone of Variable Width during Zone Melting - M. Ya. Frenkel' and A. A. Yaroshevskii. . . . .	546 403
Two-Quantum Photochemical Electron Transfer Reactions. Competing Two-Quantum Reactions. - Kh. S. Bagdasar'yan and Z. A. Sinityna. . . . .	550 627
Characteristic Features of the Change in Some Thermodynamic Properties in a Series of Analogous Compounds A <sup>III</sup> B <sup>V</sup> - V. M. Glazov, A. N. Krestovnikov, and G. L. Malyutina. . . . .	554 631
Dependence of the Sorption of Alkali Metal Cations on Silicagels upon the Acidity of the Solution - L. P. Kirichenko and Z. Z. Vysotskii. . . . .	557 635
Photo EMF and Electronic Spectra of Azomethines of o-Vanillin and Their Chelates - O. V. Kolninnov, A. P. Terent'ev, Z. V. Zvonkova, E. G. Rukhadze, and G. P. Talyzenkova. . . . .	560 639
Investigation of the Dissolution in Water of Cerium Oxalate, Labelled with Carbon-14 and Cerium-144 - N. G. Moschanskaya and Academician Vict. L. Spitsyn. . . . .	563 642
Supermolecular Structures in Polymeric Mixtures - M. A. Natov and L. B. Peeva. . . . .	566 645
Distribution of Spin Density in Derivatives of Benzoylhydrazyl Free Radicals - A. V. Ryzhmanova, Yu. M. Ryzhmanov, and L. F. Shatrakov. . . . .	569 648
Solvate-Chromic Effect and Halfwave Potentials of Some Aromatic Compounds - A. V. Finkel'shtein, A. I. Yaroshenko, and E. Yu. Belyaev. . . . .	572 651
Interrelation of Surface and Subsurface Light Sensitive Centers in the Photographic Emulsion - V. M. Belous, L. P. Mel'nichuk, and K. V. Chibisov. . . . .	575 649
n - $\pi^*$ -Luminescence of Vapors of Carbonyl-Containing Compounds - N. A. Borisevich and V. V. Gruzinskii. . . . .	578 652
Effect of Constant Magnetic Fields on the Kinetics of Ion Motion in Aqueous Solutions of Strong Electrolytes - E. Z. Gak and G. R. Rik. . . . .	581 656
Polymerization of Butadiene in the Presence of $\pi$ -Allyl Nickel Halides - A. M. Lazutkin, V. A. Vashkevich, Academician S. S. Medvedev, and V. N. Vasil'eva. . . . .	583 659
Thermodynamic Interpretation of Nezi's and Gilleo's Models and of the Cluster Model - A. N. Men', Yu. N. Kurushin, M. G. Zhuravleva, and G. L. Chufarov. . . . .	586 662
Mechanism of Reversible Molecular Orientation in Solution - B. S. Neporent, O. V. Stolbova, and A. M. Makushenko. . . . .	589 665
Relation between the Activation Energy of Liquid-Phase Hydrogenation and Displacement of the Catalyst's Potential - S. M. Reshetnikov, A. M. Sokol'skaya, and D. V. Sokol'skii. . . . .	592 669
Hole Centers in Irradiated Alkali Silicate Glasses - T. A. Sidorov and V. A. Tyul'kin. . . . .	595 672
Electrochemical Properties of Radioactive Samples of Zinc and Silver - Academician V. I. Spitsyn, I. E. Zimakov, and B. I. Bryantsev. . . . .	598 675
Proton Magnetic Resonance of Phenyl and Ethynyl Derivatives of Germanium and Silicon - É. I. Fedin, P. V. Petrovskii, L. K. Luneva, and A. M. Sladkov. . . . .	602 679
Adsorption Lowering of the Strength of a Magnesium Oxide Catalyst during the Process of Catalysis - E. D. Shchukin, S. I. Kontorovich, and M. V. Dukarevich. . . . .	605 682
Surface Activity of Polymers - V. I. Eliseeva, I. V. Nazarova, and A. B. Taubman. . . . .	608 1082
Magnetic Susceptibility of Low-Spin Cobalt Chelates - V. V. Zelentsov. . . . .	610 1084
Structural Transitions at High Uniaxial Tensile Deformations of Polyoxypolyene over a Wide Range of Temperatures - Academician V. A. Kargin, T. L. Sogolova, and V. M. Rubinstein. . . . .	612 1087
Relationship between the Electronic Absorption Spectra of Molecules and Their Reactivity - G. V. Saldov and N. G. Bakhtiev. . . . .	615 1090
Thermoluminescence, Electron Paramagnetic Resonance, and Electronic Absorption Spectra of Irradiated Silicate Glasses - T. A. Sidorov, V. A. Tyul'kin, and V. S. Akmanov. . . . .	619 1094
Mechanism of Low-Frequency Dielectric Relaxation and Viscous Flow in Alcohols and Water - M. L. Shaikparonov. . . . .	621 1097

(Contd)

Available From Consultants Bureau

	Engl./Russ.
The Electron Paramagnetic Resonance of Ions of the Iron Transition Group in Fluoroberyllate Glasses - É. I. Abdrashitova and G. T. Petrovskii . . . . .	625 1305
Magnetic Susceptibility in the $\text{Pu}(\text{C}_2\text{O}_4)_3 \cdot 3\text{H}_2\text{O}-\text{Th}(\text{C}_2\text{O}_4)_3 \cdot 2\text{H}_2\text{O}$ System - T. G. Aminov, V. B. Rydkimov, V. V. Zolentsov, and F. A. Zakharova . . . . .	628 1309
Part Played by Dispersion Forces in the Interaction between the Organic Counter-Ion and an Ion Exchange Resin Matrix - L. M. Vagina and G. S. Libinson . . . . .	630 1312
Interfacial Surface Tension of Gallium at a Boundary with Certain Nonpolar Organic Liquids - S. N. Zadumkin, A. A. Karashaev, and A. L. Kukhno . . . . .	633 1315
Structure-Formation Processes in Strong Polyelectrolytes - Academician V. A. Kargin, Z. Ya. Berestneva, E. P. Cherneva, T. D. Ignatovich, and G. S. Potapova . . . . .	636 1318
Dissociation of Some Semiconductor Compounds of the $\text{A}^{\text{III}}\text{B}^{\text{V}}$ Type Connected with the Action of Light Pulses from an Optical Quantum Generator - B. A. Krasnyuk, V. N. Maslov, and T. S. Stepanova . . . . .	639 1320
Force Constants of Si-O Bonds and Their Dependence on the Nature of Substituents at Silicon and Oxygen - A. N. Lazarev, Kr. Poiker, and T. F. Tenisheva . . . . .	641 1322
Thermal Expansion and Melting of Small Crystals of Silver - Yu. I. Petrov and Yu. I. Fedorov . . . . .	644 1325
Multistage Nature of Combustion in Dilute Hydrogen Sulfide Flames - G. A. Sachyan, Yu. M. Gershenzon, and A. B. Naibandyan . . . . .	647 1328
Chemisorption of Nitrogen and the Mechanism of Ammonia Synthesis on Iron Purified in an Ultravacuum - I. I. Tret'yakov, B. R. Shub, A. V. Sklyarov, and S. Z. Roginskii . . . . .	651 1332
Investigation of Reversible and Irreversible Changes in the Work Function and Electric Conductivity of Titanium Dioxide in the Chemisorption of Oxygen - E. N. Figurovskaya and V. F. Kiselev . . . . .	654 1336

The Russian press dates (podpisano k pechatii) of the first and last issues covered in this issue of the translation were, respectively, 6/23/1967 and 8/19/1967. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

## CONTENTS

		RUSS. PAGE	RUSS. ISSUE	RUSS. PAGE
<b>AERODYNAMICS</b>				
Exact Solutions of Equations Describing the Motion of a Gravitating Gas with Homogeneous Deformations and Transverse Velocity Components. <u>E. V. Ryazanov</u> . . . . .	(T)	743	4	774
<b>CRYSTALLOGRAPHY</b>				
The Structure of Amorphous Germanium, Obtained by Argon Ion Bombardment of the Crystalline Form. <u>P. V. Pavlov and D. I. Tetel'baum</u> . . . . .	(E)	746	4	823
Transition of Silicon Carbide from the Hexagonal to the Cubic Phase under the Influence of High Pressures and High Temperatures. <u>M. I. Sokhor, V. G. Kondakov, and L. I. Fel'dgun</u> . . . . .	(E)	749	4	826
Spontaneous Growth of Magnesium Oxide Single Crystal Whiskers. <u>P. P. Budnikov, V. A. Perepelitsin, D. B. Sandulov, and V. K. Sturman</u> . . . . .	(E)	752	5	1045
Crystal Structure of $\text{Mo}_3\text{CoSi}$ . <u>E. I. Gladyshevskii, P. I. Kripyakevich, and R. V. Skolozdra</u> . . . . .	(E)	755	5	1047
Metastable Structures in Aqueous Solutions. <u>L. D. Kislovskii</u> . . . . .	(T)	759	6	1277
<b>CYBERNETICS AND CONTROL THEORY</b>				
Optimum Training Systems. <u>V. S. Pugachev</u> . . . . .	(T)	762	5	1022
Optimal Control of Systems with Distributed Parameters. <u>V. I. Plotnikov</u> . . . . .	(T)	765	6	1238
Synthesis of Optimal-in-the-Mean Automatic Systems. <u>A. I. Propoi and Ya. Z. Tsypkin</u> . . . . .	(T)	768	6	1242
<b>FLUID MECHANICS</b>				
System of Boundary Layer Equations for Axisymmetric Flow. <u>O. A. Oleinik</u> . . . . .	(T)	770	4	777
Invariant Solutions of Equations Describing the Motion of Fluids and Gases in Long Pipes. <u>M. G. Sukharev</u> . . . . .	(T)	774	4	781
<b>MATHEMATICAL PHYSICS</b>				
Variational Principles for the Equations of the Kinetic Theory of Gases. <u>A. M. Kogan</u> . . . . .	(T)	777	4	785



	PAGE	RUSS. ISSUE	RUSS. PAGE
PHYSICS			
Hyperfine Structure of the Electron Paramagnetic Resonance Spectra of the Vanadyl Ion in Vanadium-Containing Glass. <u>L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovykh</u> . . . . .	(E) 780	4	789
Multiphoton Excitation of Organic Molecules. <u>A. M. Prokhorov, V. D. Shigorin, and G. P. Shipulo</u> . . . . .	(E) 783	4	793
Anisotropy of Optical Transitions in Metallochlorins and Chlorophyll. <u>A. N. Sevchenko, K. N. Solov'ev, V. A. Mashenkov, S. F. Shkirman, and A. P. Losev</u> . . . . .	(E) 787	4	797
Temperature Green's Functions for Weakly Nonideal Bose-Einstein Systems. <u>V. V. Tolmachev</u> . . . . .	(T) 790	4	800
Onset of Uniaxial Anisotropy in Strongly Deformed Nickel after Magnetic Annealing. <u>Ya. S. Shur, A. P. Potapov, A. A. Glazer, R. I. Tagirov, and A. S. Ermolenko</u> . . . . .	(E) 793	4	804
Dependence of the Vibrational Deactivation of the Iodine Molecule on the Ratio of the Collision Time to the Period of Vibration. <u>N. A. Generalov and V. D. Kosynkin</u> . . . . .	(E) 796	5	1033
$\Delta F$ , $\Delta n$ , and $\Delta \mu$ Corrections in the Asymptotic Expansion Method in the Modified Formulation of the Problem of a Nonideal Bose-Einstein System. <u>V. V. Tolmachev</u> . . . . .	(T) 799	5	1036
Use of an Interferometer with a Diffraction Grating to Investigate Flow around Models in a Shock Tube. <u>L. A. Vasil'ev, I. V. Ershov, É. V. Sokolenko, and V. I. Yanichkin</u> . . . . .	(T) 802	6	1245
Complex Splitting of the Nuclear Magnetic Resonance Spectrum of a Two-Spin System. <u>B. M. Moiseev and L. I. Fedorov</u> . . . . .	(T/E) 806	6	1249
Radiation of Elementary Particles. <u>K. P. Stanyukovich</u> . . . . .	(T) 808	6	1252
The Anomalous Energy Dependence of the Polarization of the Radiation from Atoms Excited by a Beam of Electrons. <u>G. V. Sholin</u> . . . . .	(T) 811	6	1256
TECHNICAL PHYSICS			
The Kinetics of Healing of Fission-Fragment Tracks in Thin Mica Sheets. <u>Ya. E. Geguzin, I. G. Berzina, and I. V. Vorob'eva</u> . . . . .	(E/T) 814	4	807
Influence of Surface-Active Lubricants on Internal Stresses in Reversing Sliding. <u>V. D. Evdokimov</u> . . . . .	(E) 817	4	810
Faraday Effect and Optical Constants of Iron - Nickel Alloy Films. <u>L. V. Kirenskiĭ, N. I. Syrova, and I. S. Édel'man</u> . . . . .	(E) 819	4	813
Epitaxial Silicon Layers Obtained by Sublimation in Vacuum. <u>V. V. Postnikov, M. I. Ovsyannikov, R. G. Loginova, R. A. Rubtsova, T. N. Sergievskaya, and V. A. Tolomasov</u> . . . . .	(E) 822	4	817
Recrystallization Diagram of Low-Carbon Iron Obtained by Vacuum Melting. <u>T. V. Simonishvili, B. V. Simonov, and R. A. Tivonenko</u> . . . . .	(E) 824	5	1039
Effect of a Third Component on the Behavior of Impurities in the Zone Melting of Aluminum. <u>A. I. Belyaev and A. I. Yukova</u> . . . . .	(E) 827	6	1259
The Nature of Decomposition Products and the Precipitation Mechanism in Age Hardening of Commercial Iron. <u>Yu. A. Skakov</u> . . . . .	(E) 830	6	1263
Magnesium Borides Prepared under Superhigh-Pressure Conditions. <u>N. E. Filonenko, V. I. Ivanov, L. I. Fel'dgun, M. I. Sokhor, and L. F. Vereshchagin</u> . . . . .	(E) 833	6	1266
Effect of Surface-Active Substances on the Dislocation Distribution in Fatigued Metals. <u>V. V. Shevelya and B. I. Kostetskii</u> . . . . .	(E) 836	6	1270

(Contd)

Available from American Institute of Physics  
Vol 12, No 8, Feb 1968

DOKLADY

Vol 175, No 4-6, Aug 1967

		PAGE	RUSS. ISSUE	RUSS. PAGE
THEORY OF ELASTICITY				
Solvability of Equations for Intense Bending of Plates. <u>Yu. A. Dubinskii.</u>	(T)	839	5	1026
Creep of Metals. <u>T. B. Larina.</u> . . . . .	(T)	842	5	1030

Available from American Institute of Physics

Vol 12, No 8, Feb 1968

# Soviet Physics DOKLADY

A Translation of the "Physics Sections" of the  
Proceedings of the Academy of Sciences of the USSR

(Russian Original Vol. 176, Nos. 1-3, September, 1967)

Vol. 12, No. 9, pp. 845-918

March, 1968

## CONTENTS

		PAGE	RUSS. ISSUE	RUSS. PAGE
<b>AERODYNAMICS</b>				
Flow of a Viscous Gas near a Wall with a Corner. <u>I. Yu. Brailovskaya</u> .	(T)	845	3	549
<b>ASTRONOMY</b>				
The Lithium Content of T Tauri Stars and Cosmic Rays. <u>G. A. Gurzadyan</u> . . . . .	(T)	848	2	291
<b>CRYSTALLOGRAPHY</b>				
Hydrothermal Synthesis and Symmetry of Crystals of the Oxytungstates $\text{Ln}_2\text{W}_2\text{O}_9$ (Ln = Ce, Pr, and Nd). <u>P. V. Klevtsov, L. Yu. Kharchenko,</u> <u>and R. F. Klevtsova</u> . . . . .	(E)	851	3	575
<b>FLUID MECHANICS</b>				
Long-Time Behavior of the Solution of the Cauchy-Poisson Problem. <u>E. K. Isakova</u> . . . . .	(T)	854	1	50
Calculation of the Flow in a Laval Nozzle. <u>U. G. Pirumov</u> . . . . .	(T)	857	2	287
<b>MATHEMATICAL PHYSICS</b>				
Determination of the Type of a Space According to Petrov's Classification. <u>R. I. Khrapko</u> . . . . .	(T)	861	1	56
<b>MECHANICS</b>				
The Theory of Constructing Models of Continuous Media. <u>V. A. Zhelnorovich</u> . . . . .	(T)	863	2	283
<b>PHYSICS</b>				
Propagation of Wave Beams in Nonlinear Media. <u>V. N. Lugovoi</u> . . . . .	(T)	866	1	58
Study of Solid Solutions in the HgTe-HgS and HgSe-HgS Systems. <u>F. F. Kharakhorn, V. M. Petrov, M. V. Pashkovskii, and</u> <u>R. V. Lutsiv</u> . . . . .	(E)	869	1	62
Calculation of the Elastic Constants of Quasiasotropic Polycrystalline Materials. <u>K. S. Aleksandrov</u> . . . . .	(T)	872	2	295
On Current Divergences. <u>L. Enkovski, V. V. Kukhtin, I. Montval, and</u> <u>Nguyen Van Huu</u> . . . . .	(T)	874	2	298
Thermodynamic Properties of Superconductors with Nonmagnetic Impurities. Overlap of Energy Bands. <u>V. A. Moskalenko</u> . . . . .	(T)	877	2	301

Copyright © 1968 by the American Institute of Physics

(Contd)

Available From the American Institute of Physics  
Vol 12, No 9, March 1968

		PAGE	RUSS. ISSUE	RUSS. PAGE
The Question of High-Temperature and Surface Superconductivity. V. L. Ginzburg and D. A. Kirzhnits . . . . .	(T)	880	3	553
Spectral Evidence of Interaction between Organic Molecules and the Surface of a TII Hole Semiconductor. Yu. D. Pimenov . . . . .	(E)	883	3	556
The Influence of the Hydrodynamic Interaction on the Intermolecular Contribution to the Magnetic Relaxation Time in Liquids. T. N. Khazanovich . . . . .	(T/E)	886	3	560
TECHNICAL PHYSICS				
The Nature of the Deformation of Inorganic Glasses during Microindentation. G. M. Bartenev and D. S. Sanditov . . . . .	(E)	889	1	66
Development of Dislocation Arrays in Surface Layers of Metals under Certain Types of Loading. B. I. Kostetskii and V. V. Shevelya . . . . .	(E)	892	1	70
Deformation of Brittle Porous Materials under Compressive Stress in a Compression Apparatus. I. I. Cherkasov and Kh. Ibragimov . . . . .	(E)	896	1	73
Critical Magnetic Fields of Niobium-Titanium-Zirconium Alloys. N. E. Alekseevskii, O. S. Ivanov, I. I. Raevskii, and N. V. Stepanov . . . . .	(E)	896	2	305
Measuring the Compressibility of Gases by the Displacement Method. Nitrogen Compressibility at Pressures Up to 10,000 atm and Temperatures to 400°. D. S. Tsiklis and E. V. Polyakov . . . . .	(E)	901	2	308
Mechanism of High-Temperature Creep of Metals with High Stacking- Fault Energy. V. A. Yanushkevich and L. I. Ivanov . . . . .	(T)	905	2	312
Influence of Vibration on the Crystallization of Cadmium. D. L. Leichkis, N. V. Mikhailov, and P. A. Rebinder . . . . .	(E)	908	3	564
Effect of Electron Bombardment on the Mechanical Properties of High- Strength Steel. B. A. Prusakov, D. A. Prokoshkin, L. N. Bystrov, and L. I. Ivanov . . . . .	(E)	912	3	568
THEORY OF ELASTICITY				
Fundamental Boundary Value Problems in Potential Theory for a Space with an Elliptic Slot. The Pressure Due to an Elliptic Die on an Elastic Half-Space. M. D. Martynenko . . . . .	(T)	914	1	53

Available From the American Institute of Physics  
Vol 12, No 9, March 1968

# SOVIET ELECTROCHEMISTRY

A translation of *Élektrokhimiya*

Volume 3, Number 8

August, 1967

## CONTENTS

	Engl./Russ.
Stationary Operational Regime for Unilaterally Polarized Liquid Porous Electrode with Bilateral Diffusion Feed of the Reagent at High Polarization—I. G. Gurevich and V. S. Bagotskii . . . . .	807 915
Electrochemical Process with the Participation of a Depolarizer in the Form of a Film on the Electrode Surface—A. G. Voloshin . . . . .	815 924
Study of the Adsorption of Aliphatic Alcohols on Mercury Based on Measurement of the Differential Capacitance. II. Effect of the Concentration and Nature of an Indifferent Electrolyte—B. B. Damaskin, A. A. Survila, and L. E. Rybalka . . . . .	818 927
Calculation of the Diffusion Current to a Vibrating Electrode—B. M. Grafov . . . . .	825 935
Dependence of Current on Potential Sweep Rate and on Rate of Revolution of Disc Electrode—G. P. Girina, V. Yu. Filinovskii, and L. G. Feoktistov . . . . .	831 941
Investigation of the Adsorption of Nonpolar Hydrocarbons on Solution-Air and Solution-Mercury Interfaces—R. I. Kaganovich, V. M. Gerovich, and O. Yu. Gusakova . . . . .	836 946
Behavior of Antimony (III) by the Method of Vector Polarography with a Stationary Mercury Electrode—L. N. Vasil'eva and Z. L. Yustus . . . . .	842 953
BRIEF COMMUNICATIONS	
Kinetics of the Cathodic Reduction $\text{Co}^{+3} \rightarrow \text{Co}^{+2}$ in Perchloric Acid Medium—L. M. Borisova and A. L. Rotinyan . . . . .	846 958
Acidity of the Layer near the Cathode in the Electrolysis of Sodium Chloride Solutions with a Mercury Cathode—A. L. Rotinyan, T. M. Ovchinnikova, and N. V. Velichko . . . . .	849 960
Charging Curves of a Platinum Electrode in Solutions of Phosphoric Acid at Various Temperatures—O. A. Petrii, R. V. Marvet, and Zh. N. Malysheva . . . . .	851 962
Criterion of Similarity of the Process of Electrolysis of Aqueous Solutions of Certain Salts—E. A. Vainrib, E. A. Baranov, G. L. Medrish, L. G. Zobnina, and V. G. Shtakgauz . . . . .	854 965
Polarization of Tubular Electrodes of Various Metals, Partially Immersed in a Molten Carbonate Electrolyte—L. P. Klevtsov, G. G. Arkhipov, and G. K. Stepanov . . . . .	856 967
Anodic Dissolution of Deeply Passivated Zinc in Alkaline Solution Supersaturated with Zincate—T. L. Popova, G. L. Vidovich, N. I. Simonova, and B. N. Kabanov . . . . .	860 970
Mechanism of Electrooxidation of Hydrazine in an Alkaline Medium—G. V. Vitvitskaya and V. S. Daniel'-Bek . . . . .	863 973
Electrochemical Behavior of Benzene in Hydrogen Fluoride—G. N. Kokhanov and S. A. Per'kova . . . . .	837 977
Thermoelectric Phenomena in Solid Uni-Univalent Electrolytes—B. M. Mogilevskii and O. U. Usmanov . . . . .	871 981
Change in True Surface Area of an Iron Cathode during Polarization in an Alkaline Solution—E. M. Kuchinskii and G. N. Kokhanov . . . . .	875 986
Anodic Behavior of Gold in Solutions of Potassium Hydroxide—F. F. Faizullin and N. P. Nikandrov . . . . .	878 988

(Contd.)

Available from Consultants Bureau

Mechanism of the Spontaneous Decomposition of Hydrogen Peroxide on the Surface of a Carbon Electrode in Acid Medium—V. S. Daniel'-Bek and A. I. Anurova .....	881	990
Influence of the Background Concentration upon Incompletely Reversible Peaks in Alternating Current Polarography—R. M. F. Salikhdzhanova and S. I. Zhdanov .....	884	993
Method of Creating Optimum Cohesion of Electrodeposited Copper with an Aluminum Alloy, Used as an Unbreakable Mold—Ya. A. Gofman .....	888	997
Determination of the Activities of the Components in Melts of the System $PbBr_2-NaBr$ with Electrodes Reversible with Respect to the Cations—L. Ya. Feenberg, A. G. Morachevskii, and A. F. Alabyshev .....	892	1000
The Difference of the Electrode Potentials of Amalgams of Two Isotopes of Lithium—R. P. Ageev, V. L. Balashov, and B. P. Kiselev .....	894	1002
Phenomenology of the Formation of an Electrolytic Film on a Partially Immersed Electrode—V. A. Snepelin .....	896	1004
Possibility of Determining the Number of Preceding Chemical Stages in an Electrochemical Process—V. F. Ivanov and E. V. Pekar .....	899	1007
Temperature Dependence of the Dielectric Permeability of Diglim and Diethyl Ether—L. P. Gol'dshtein, E. N. Gur'yanova, N. M. Alpatova, and Yu. M. Kessler .....	903	1011
Effect of the Nature of a Metal on the Anodic Oxidation Rate for Carbon Dissolved in It—P. I. Buler, O. A. Esin, and Yu. P. Nikitin .....	905	1012
Mechanism of Anodic Dissolution of Copper in Phosphoric Acid. I. Structural Changes of the Surface during Dissolution—T. N. Grechukhina, A. Sh. Valeev, and N. A. Paltkhov .....	908	1016
A Microcoulometric Cell—B. A. Orgiyan .....	914	1018
LETTERS TO THE EDITOR		
Difference in the Catalytic and Electrochemical Activities of Smooth and Platinized Platinum Electrodes—O. A. Zharnova, Yu. B. Vasil'ev, and V. S. Bagotskii .....	915	1020

The Russian press date (podpisano k pechatl) of this issue was 7/25/1967.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

# TELECOMMUNICATIONS and RADIO ENGINEERING

1967

NUMBER 9

## CONTENTS

	Page
<b>PART 1</b> <b>ELEKTROSVYAZ</b> <b>Volume 21</b>	
A.G. Zyuko: Assessment of Communication System Noise Immunity from the Reliability Function .....	1
N.B. Zeliger: Choice of Code Pulse Registration Method in Discrete Data Transmission .....	8
V.I. Kulya: The Discrete Representation of Vocoder Signals .....	16
V.S. Ponkratov and O.Ye. Antonov: Optimal Reception of Binary Signals in a Background of Non-Gaussian Noise .....	19
Yu.A. Tamm: Noise Immunity of a Binary Signal Receiver Using Optimal Weighted Integration of the Signal "Sign" .....	26
M.I. Dorman: Information Transmission in Systems with Decision Feedback and Dual Signal Modulation .....	31
B.S. Livshits and G.B. Khanin: Grouping and Control of Call Establishment Processes in the ATS-K and PSK-1000 Offices .....	37
I.V. Pavlov: Protection by an Alternating System of Draining Transformers .....	44
P.M. Kopylov: Nonlinear Circuit for Correcting Differential Gain .....	52
<b>BRIEF COMMUNICATIONS</b>	
M.V. Butrov: Spectrum of a Signal Frequency-Modulation by an Arbitrary Series of Multiple Frequencies .....	56
G.S. Eidus and G.V. Yaroshevskiy: Relationship Between the Spectra of Complete and Truncated Pulses .....	58
V.V. Bykov: Algorithms for Digital Simulation of Some Types of Stationary Normal Random Processes .....	62
New Books .....	65
In Our Forthcoming Issues .....	65

## PART 2 RADIOTEKHNIKA Volume 22

L.Ya. Shapiro: Generalization of a Recent Theory of the Autonomous Four-Pole to Noisy Linear Networks .....	67
V.A. Kisel' and I.V. Kitsul: Synthesis of a Network Having a Prescribed Impulse by the z-Transform Method .....	73
N.I. Kaushanskiy: Synthesis of Frequency Characteristics by Means of a Tapped Delay Line .....	80
E.A. Akchurin and V.V. Rud': Graphical Method of Determining the Frequency Characteristics of Resonant Circuits Containing Nonlinear Active Element ...	86
A.G. Medoks: Design of a Waveguide Y-Circulator .....	90
L.G. Maloratskiy: Analysis of a Hybrid Ring .....	95
G.I. Veselov: Two-Layer Waveguide of Elliptical Cross Section .....	100
V.V. Roashchin: Stability of Regenerative Amplifiers with Quarter-Wave Coupling Between Diodes .....	106

(Contd)

Available From The Institute of Electrical and Electronics Engineers

	Page
G.I. Koptev and L.A. Korneyev: Equalization of Operating Conditions in Parallel-Connected Transistors of Means of Automatic Emitter Bias .....	111
A.M. Tishenko: Pulse-Duration Control of a Transistor Multivibrator by Means of a Linear Potentiometer .....	117
A.Z. Khaykov: Stability of a Klystron Amplifier with Double Interaction in the Output Circuit .....	121
P.M. Vuzman: A Class of Sequences for Phase Keying Signals .....	128
CCIR Handbook on High-Frequency Directional Antennas .....	131
<b>BRIEF COMMUNICATIONS</b>	
V.Ya. Odesskiy and M.G. Fayerman: Simple Method of Controlling the Hysteresis Loop of a Schmitt Trigger .....	132
P.P. Timoshkevich: A Method of Converting a Pulsed Waveform to Phase Waveform and Vice Versa .....	133
I.L. Belotserkovskiy and I.Kh. Rizkin: Transistor Low-Frequency Dividers Using RC-Oscillators .....	135
Ya.A. Furman: Estimation of Automatic-Tracking Accuracy by the "n-Consecutive-Misses" Criterion .....	137
B.R. Levin and Ya.A. Fomin: Approximate Determination of the Overshoot-Duration Distribution of the Phase of a Gaussian Stationary Random Process ...	140
P.A. Gerastovskiy: On N.P. Khvorostenko's Paper "Some Errors in the Analysis of the Noise Immunity of Phase-Telegraphy Systems" .....	142
N.P. Khvorostenko: On P.A. Gerastovskiy's Letter .....	146
M.Z. Klyumel' and M.B. Tenin: Letters to the Editors .....	147
I.V. Mal'skiy: Book Review "Transistor and Tunnel-Diode Circuits for Radio Engineering. Theory and Design" .....	148
The 23rd All-Union Conference of the Popov Society .....	149
I.I. Lebedev, V.B. Pestryakov, K.Kh. Murav'yev, N.K. Ivanov-Yesipovich and T.A. Rychina: The Training of Radio Engineers. The Design of Radio and Electronic Equipment and the Training of Design Engineers .....	154
L.A. Meyerovich, On His Sixtieth Birthday .....	160
New Books .....	161

#### EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arch	$\coth^{-1}$ ( $\text{ctnh}^{-1}$ )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ ( $\text{arc cos}$ )
arctg	$\cot^{-1}$ ( $\text{arc cot}$ )
arcsin	$\sin^{-1}$ ( $\text{arc sin}$ )
arotg	$\tan^{-1}$ ( $\text{arc tan}$ )
ch	$\cosh$
cosec	$\csc$
ctg	$\cot$ ( $\text{ctn}$ )
cth	$\coth$ ( $\text{ctnh}$ )
rot	$\text{curl}$
sch	$\text{sech}$
sh	$\sinh$
tg	$\tan$
th	$\tanh$

Available From The Institute of Electrical and Electronics Engineers



A. I. Ansel'm	Ch. B. Lushehik
A. S. Borovik-Romanov	A. N. Orlov
L. N. Dobretsov	A. F. Prikhot'ko
L. P. Gor'kov	A. R. Regel'
O. M. Konstantinov	S. M. Ryvkin
M. I. Kuznetsov	G. A. Smolenskii
(Associate Editor)	V. M. Tichkevich
L. I. Laricvin	B. K. Vainshtein
(Secretary)	V. S. Vavilov
M. I. Korsunskii	L. F. Vereshchagin
M. A. Krivoglas	S. N. Zhurkov
G. V. Kurdyumov	(Editor)
I. M. Lifshits	Leningrad State University
	V. P. Zhuse

# Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 9, No. 8, pp. 2145-2460, August, 1967)

Vol. 9, No. 8, pp. 1687-1932

February, 1968

## CONTENTS

	PAGE	RUSS. PAGE
Scattering of High-Energy Particles Incident on a Solid at an Angle Close to $\pi/2$ . <u>O. B. Firsov</u> . . . . .	(T) 1687	2145
Theory of Kinetic Oscillations in Semiconductors. <u>P. M. Karageorgii-Alkalaev and A. Yu. Leiderman</u> . . . . .	(T) 1691	2151
A Method for Constructing the Nonequilibrium Density Matrix in the Presence of an External Alternating Field. <u>L. L. Buishvili</u> . . . . .	(T) 1695	2157
Luminescence of Mixed $ZnS_x - CdS_{1-x}$ Crystals Subjected to Two-Photon Excitation. <u>M. S. Brodin, N. I. Vitrikhovskii, S. V. Zakrevskii, and V. Ya. Reznichenko</u> . . . . .	(E) 1699	2163
Ultrasonic Relaxation near a Ferroelectric Phase Transition Point of the Second Kind in an Electric Field. <u>S. Ya. Geguzina and B. L. Timan</u> . . .	(T/E) 1702	2167
Investigation of Electrical and Elastic Properties of Hexagonal Zinc Sulfide in the Temperature Range 1.5-300°K. <u>I. B. Kobayakov and G. S. Pado</u> . . . . .	(E) 1707	2173
Paramagnetic Resonance Spectrum in the Presence of a Strong Electron-Phonon Interaction. <u>B. I. Kochelaev</u> . . . . .	(T) 1712	2180
Influence of Heat Treatment on the High-Strength State of Glass. <u>L. G. Baikova, F. F. Vitman, and V. P. Pukh</u> . . . . .	(E) 1716	2185
Optical Determination of the Elastic Limit of Sodium Chloride Single Crystals in the Liquid-Helium Temperature Range. <u>O. V. Klyavin, Yu. M. Chernov, and A. V. Stepanov</u> . . . . .	(E) 1720	2190
Effect of Force Constant Changes on the Properties of Crystals Containing Impurity Atoms. <u>A. P. Zhernov and G. R. Augst</u> . . . . .	(T) 1724	2196
Coherent Effects in Crystals Containing Electron Impurity Centers. <u>M. A. Ivanov</u> . . . . .	(T) 1731	2206
Theory of Sound and Drift Waves in Crystals Having a Large Dielectric Constant. <u>Yu. A. Kukibnyi and V. N. Piskovoi</u> . . . . .	(T) 1737	2215
Deceleration of Slow Hydrogen and Deuterium Ions in a Thin Silver Foil. <u>Yu. V. Gott and V. G. Tel'kovskii</u> . . . . .	(E) 1741	2221
Radiation-Stimulated Migration Processes in Solids. <u>A. E. Kiv and F. T. Umarova</u> . . . . .	(T) 1745	2225
Exciton-Phonon Interaction in One-Dimensional Molecular Crystals. <u>A. S. Davydov and B. M. Nitsovich</u> . . . . .	(T) 1749	2230
Spin-Cyclotron-Phonon Resonance in Semiconductors. <u>A. Yu. Matulis</u> . . .	(T) 1755	2238
Work Function of the Adsorption System Scandium - Tungsten. <u>V. B. Voronin</u> . . . . .	(E) 1758	2242

Copyright © 1968 by the American Institute of Physics

(Contd)

Available from American Institute of Physics  
Vol 9, No 8, Feb 1968

		RUSS. PAGE	PAGE
Neutron Diffraction Study of Atomic and Magnetic Structures of Calcium - Vanadium-Ferrite Garnet. <u>V. P. Plakhtii, G. P. Gordeev, A. A. Kuzina, and É. I. Turkevich</u> . . . . .	(E)	1762	2247
Heating of the Crystal Lattice during Paramagnetic Relaxation in Gadolinium Hexaantipyrinate. <u>V. A. Atsarkin and R. N. Shchelokov</u> . . . . .	(E)	1766	2252
Electrical Fluctuations in a Solid-State Plasma in a Strong Electric Field. <u>Sh. M. Kogan and A. Ya. Shul'man</u> . . . . .	(T)	1771	2259
Experimental Investigation of the Optical Properties and of the Nonlinear Absorption Mechanism of Glass Containing Cadmium Selenide. <u>A. M. Bonch-Bruevich, T. K. Razumova, and G. M. Rubanova</u> . . . . .	(E)	1776	2265
Use of a Comparison Method in Measurement of the Acoustoelectric emf. <u>L. V. Selivanov and Yu. E. Nevskii</u> . . . . .	(E)	1783	2274
Generation of Hypersound and the Acoustic Excitation of Spin Waves by Means of a Thin Magnetic Film. <u>V. A. Ignatchenko and E. V. Kuz'min</u> . . . . .	(T)	1785	2277
Galvanomagnetic Effects in Semiconductors Having Toroidal Isoenergetic Surfaces. <u>A. G. Aronov and P. Kh. Musaev</u> . . . . .	(T)	1790	2284
Orthorhombic EPR Spectrum of a Pair of Interacting $\text{Nd}^{3+}$ Ions in $\text{SrF}_2$ . <u>N. E. Kask and L. S. Kornienko</u> . . . . .	(E)	1795	2291
Simple and Single Spin Waves in Ferromagnets. <u>I. A. Akhiezer and A. E. Borovik</u> . . . . .	(T)	1798	2295
An Operational Definition of Spin Temperature. <u>V. N. Tropinin</u> . . . . .	(T)	1803	2302
State of Vanadium Ions in Garnet Ferrites. <u>A. P. Nikol'skii, V. Ya. Dubossarskaya, and S. S. Gorelik</u> . . . . .	(T/E)	1809	2311
Investigation of the Domain Structure of "Hypercritical" Permalloy Films by the Magneto-optical Method. <u>G. S. Krinchik, A. N. Verkhozin, and S. A. Gushchina</u> . . . . .	(E)	1812	2314
Investigation of $\text{Ba}(\text{TiSn})\text{O}_3$ Ferroelectric Ceramics at High Pressures. <u>I. N. Polandov and V. P. Mylov</u> . . . . .	(E)	1816	2319
Temperature Dependence of the Magnetostriction Constants of Single-Crystals of Yttrium-Gallium Ferrites Measured by the Microwave Method. <u>G. A. Petrakovskii, É. M. Smokotin, and A. G. Titova</u> . . . . .	(E/T)	1820	2324
Magnetocrystalline Anisotropy of Hexagonal Ferrite Single Crystals of the System $\text{Ba}_2\text{Co}_x\text{Zn}_{2-x}\text{Fe}_{12}\text{O}_{22}$ . <u>N. N. Agapova and T. M. Perekalina</u> . . . . .	(E)	1825	2330
The Deformation of Polycrystalline Iron within the Yield Plateau. <u>L. G. Orlov</u> . . . . .	(E)	1828	2334
Generation of Dislocations on External and Internal Surfaces of Crystals. <u>L. G. Orlov</u> . . . . .	(T)	1836	2345
Influence of Hydrostatic Pressure on the Mechanism of Self-diffusion in Silver Chloride Single Crystals. <u>A. N. Murin, B. G. Lur'e, and I. V. Murin</u> . . . . .	(E)	1840	2350
Polarization of Spins by Hot Electrons in a Quantizing Magnetic Field. <u>A. K. Zvezdin</u> . . . . .	(T/E)	1843	2354
Determination of the Zero-Slope Point. <u>N. V. Kudryavtseva</u> . . . . .	(T)	1850	2364
Magnon-Phonon Interaction in Cubic Crystals. <u>V. S. Tumanov</u> . . . . .	(T)	1854	2369
Line Shape for the Characteristic Energy Losses of Electrons in Solids. <u>V. V. Rumyantsev</u> . . . . .	(T)	1860	2377
Shape of NMR Line for a Two-Spin and Nonresonant-Dipole System. <u>B. M. Moiseev and L. I. Fedorov</u> . . . . .	(T/E)	1867	2387
		(contd)	

Available from American Institute of Physics  
Vol 9, No 8, Feb 1968

		RUSS.	PAGE
	PAGE		
Formation of Submicroscopic Cracks in Loaded Oriented Amorphous-Crystalline Polymers. <u>V. S. Kuksenko, A. I. Slutsker, and A. A. Yastrebinskii</u> . . . . .	(E)	1869	2390
Mechanism of the Interaction between a Laser Light Beam and Light-Sensitive Glass. <u>L. I. Mirkin, N. F. Pilipetskii, and É. M. Rabinovich</u> . . . . .	(E)	1877	2400
Spin-Lattice Relaxation in a Solid Containing Localized Defects. <u>V. P. Sakun</u> . . . . .	(T)	1880	2404
<b>BRIEF COMMUNICATIONS</b>			
Scattering of Phonons at Point Defects in the Solid Solutions $PbTe_xSe_{1-x}$ and $Ge_xSi_{1-x}$ . <u>V. A. Saakyan</u> . . . . .	(E/T)	1885	2411
Effect of Deformation by Ultrasound on the Photosensitivity of Silver Chloride Crystals. <u>O. P. Golovko, N. A. Tyapunina, and M. P. Shaskol'skaya</u> . . . . .	(E)	1887	2414
Statistics of Indirect Exchange in Calcium - Vanadium Garnets. <u>V. P. Plakhtii</u> . . . . .	(E)	1889	2416
Velocity of Ultrasound and $\Delta E$ Effect in Ceramic Ferroelectric Elements. <u>I. I. Fedotov</u> . . . . .	(E)	1891	2419
Specific Heat and Permittivity of a Potassium Dideuterophosphate Crystal in the Vicinity of the Ferroelectric Curie Point. <u>B. A. Strukov, M. Amin, and A. S. Sonin</u> . . . . .	(E)	1894	2421
Change in the Lattice Constant of Lithium Fluoride Single Crystals Due to X-Ray Irradiation. <u>L. A. Golubeva, S. A. Smiryagina, and A. A. Shishelov</u> . . . . .	(E)	1897	2424
Acoustical Saturation of the NMR Line of $In^{115}$ in InSb. <u>Yu. V. Vladimirtsev, V. A. Golenishchev-Kutuzov, N. A. Shamukov, and I. S. Aver'yanov</u> . . . . .	(E)	1899	2426
State of Iron Impurity Ions in Silver Halides. <u>A. N. Murin, B. G. Lur'e, and P. P. Seregin</u> . . . . .	(E)	1901	2428
Pyroelectric Effect in SbSeI Single Crystals. <u>B. P. Grigas</u> . . . . .	(E)	1903	2430
Remarks on Meshcheryakov's Paper "The Susceptibility of a Four-Level Paramagnetic System under Step-by-Step Conditions at Saturation." <u>A. Jeleński and Z. Szymszak</u> . . . . .	(T)	1905	2432
Experimental Investigation of the Influence of an External Field on the EPR Spectrum of $Cr^{3+}$ Ions in Corundum. <u>V. I. Nepsha, Yu. A. Sherstkov, A. D. Gorlov, and A. A. Shchetkov</u> . . . . .	(E)	1907	2433
Thermal Conductivity of Amorphous Bodies, As Illustrated by Porcelain. <u>E. V. Shadrachev, I. A. Smirnov, and V. V. Tikhonov</u> . . . . .	(E)	1909	2435
EPR of $Mn^{2+}$ in $Cd(S_{1-x}Se_x)$ Single Crystals. <u>V. M. Maevskii, I. N. Geifman, and N. I. Vitrikhovskii</u> . . . . .	(E)	1912	2437
Effect of Various Impurities on the Thermal Conductivity of the Germanium Lattice. <u>A. V. Ioffe</u> . . . . .	(E)	1914	2439
Mechanism of Damage of Ruby by Laser Radiation. <u>É. A. Sviridenkov</u> . . . . .	(E)	1917	2442
Low-Frequency Electrical Oscillations in Barium Titanate. <u>V. A. Servuli, E. V. Zarochentsev, and O. I. Prokopalo</u> . . . . .	(E)	1919	2444
Theory of the Stark Effect in the Optical Spectrum of Impurity Ion Pairs of $3d^3$ Configuration in Corundum. <u>A. E. Nikiforov</u> . . . . .	(T)	1922	2446
Quantum Oscillations of the Photomagnetic Effect in n-Type InAs. <u>M. S. Bresler, A. V. Matveenko, and I. I. Farbshtein</u> . . . . .	(E)	1924	2448
Electrical Effects in the EPR of $Cu^{2+}$ in $CdWO_4$ . <u>A. A. Bugai, M. F. Deigen, V. O. Oganesyan, and M. V. Pashkovskii</u> . . . . .	(E)	1926	2450
Microhardness of Chromium near the Néel Point. <u>O. A. Nabutovskaya</u> . . . . .	(E)	1928	2452

Available from American Institute of Physics  
Vol 9 No 8, Feb 1968

# Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 9, No. 9, pp. 2457-2768, September, 1967)

Vol. 9, No. 9, pp. 1933-2176

March, 1968

## CONTENTS

		PAGE	RUSS. PAGE
Temperature Dependence of Dislocation Mobility in KBr Single Crystals. V. B. Pariiskii and A. I. Tret'yak. . . . .	(E/T)	1933	2457
Reduction of the Slater Parameters for an Impurity Ion. V. V. Druzhinin. Anomalous Properties of Conduction Electrons near the Curie Point. É. L. Nagaev . . . . .	(T)	1938	2463
Longitudinal Relaxation of Electric Dipoles in Crystals. R. V. Saburova. Mechanical Properties of Solid Para-Hydrogen at 4.2°K. D. N. Bol'shutkin, Yu. E. Stetsenko, and Z. N. Linnik. . . . .	(T)	1942	2469
Self-Diffusion of Cs <sup>134</sup> and <sup>137</sup> in Single Crystals and Polycrystalline Samples of Cesium Iodide. S. M. Klotsman, I. P. Polikarpova, A. N. Timofeev, and I. Sh. Trakhtenberg . . . . .	(T)	1949	2478
Dependence of the Sputtering Coefficients of Polycrystalline Targets on the Angle of Incidence of Ions. I. N. Evdokimov and V. A. Molchanov . . . . .	(E)	1952	2482
Reflection of Ions Obliquely Incident on a Single Crystal. V. E. Yurasova and D. S. Karpuzov . . . . .	(E)	1956	2487
Equations for the Sums of the Intensities in the Mössbauer Spectra. S. V. Karyagin . . . . .	(E)	1967	2503
A Tensor for the Nonlinear Polarizability of a Ferromagnetic Metal. V. M. Genkin and G. M. Genkin . . . . .	(T)	1971	2508
Adsorption and Electron Emission of Molybdenum Films on a Tungsten Single Crystal. V. A. Kuznetsov and B. M. Tsarev . . . . .	(T)	1979	2514
Mechanism and Kinetics of the Process of Sorption of Oxygen on the (111) Face of a Tungsten Single Crystal. Ya. P. Zingerman and V. A. Ishchuk . . . . .	(T)	1981	2517
Investigation of the Surface of Cadmium Selenide by the EPR Method. - Z. Z. Ditina and L. P. Strakhov . . . . .	(E)	1987	2524
Mixing of Two Frequencies of Light by Free Current Carriers in Semiconductors Possessing Nonparabolic and Nonspherical Energy Surfaces. A. A. Grinberg . . . . .	(E)	1992	2529
Optical Elastic Limit of Lithium Fluoride Single Crystals in the Temperature Range 300-1.4°K. O. V. Klyavin, Yu. M. Chernov, and A. V. Stepanov. . . . .	(E)	2000	2539
		2004	2544
		2008	2549

(Contd)

Copyright © 1968 by the American Institute of Physics

Available From American Institute of Physics  
Vol 9, No 9, March 1968

		PAGE	RUSS. PAGE
Experimental Method for Determining Thermal Oscillations for Coherently Scattering Crystals. B. A. Kotov, N. M. Okuneva, and A. L. Shakh-Budagov	(E)	2011	2553
The Fluctuations and Scattering Processes of Slow Neutrons and Light in Antiferromagnets in a Strong Magnetic Field. I. A. Akhiezer and Yu. L. Bolotin	(T)	2016	2559
Equations of Motion for the Magnetization and Equations for the Temperature Change in a Ferrodielectric. É. G. Petrov and A. A. Yatsenko	(T)	2022	2568
Quantum Oscillations of Thermomagnetic Coefficients in Strong Magnetic Fields. Yu. M. Gal'perin	(T)	2029	2579
Determination of the Size of Regions of Concentration Inhomogeneity in Certain Single-Phase Silver-Base Alloys from Measurements of the Zener Relaxation. K. M. Sotrakhman and Yu. V. Piguzov	(E)	2034	2586
Emergence of Local Vibrations of Additive Molecular Ions in the Infrared Absorption Spectra of Alkali Halide Crystals. A. I. Stekhanov and T. I. Maksimova	(E)	2037	2590
Microscopic Theory of Diffusion in Crystalline Solid Solutions and the Time Evolution of the Diffuse Scattering of X Rays and Thermal Neutrons. A. G. Khachatryan	(T)	2040	2594
Plastic Deformation of Silicon in the Brittle Fracture Region. V. I. Nikitenko, M. M. Myshlyaev, and V. G. Eremenko	(E)	2047	2604
Double Electron-Nuclear Magnetoacoustic Resonance at Localized Electronic Centers. M. F. Deigeh and I. I. Zheru	(T)	2053	2611
Dielectric Polarization and Thermal Expansion of Polarized Ceramic Samples of the $PbTiO_3$ - $PbZrO_3$ - $PbMg_{0.5}W_{0.5}O_3$ System. Yu. E. Stolypin and V. A. Isupov	(E)	2059	2619
Conduction Mass of Holes in InSb. G. P. Skorniyakov, I. M. Tsidi'kovskii, T. P. Chukina, and V. A. Kokoshkin	(E)	2064	2625
Electroluminescence Transport Equations and the Investigation of These Equations Using a Two-Stage Model. E. Yu. L'vova	(T)	2068	2630
Thermal Conductivity of Heavily Doped p-Type PbTe. I. A. Smirnov, M. N. Vinogradova, N. V. Kolomoets, and L. M. Sysoeva	(E)	2074	2638
Trivalent Rare Earths in Cerium Dioxide Single Crystals. Spin-Lattice Relaxation of Cubic and Trigonal $Er^{3+}$ Centers. A. A. Antipin, Z. N. Zonn, A. N. Katyshev, I. N. Kurkin, and L. Ya. Shekun	(E)	2080	2646
The Interband Interaction and Spontaneous Polarization of a Crystal Lattice. I. B. Bersuker and B. G. Vekhter	(T)	2084	2652
Thermal Equation of State of Solid Solutions. Ya. A. Iosilevskii	(T)	2090	2661
Acoustic Nuclear Magnetic Resonance in Plastically Deformed NaCl. S. B. Grigor'ev, L. G. Merkulov, and A. M. Sazonov	(T/E)	2096	2670
Resonant Frequencies in a Two-Sublattice Uniaxial Ferrite in the Noncolinear Phase. B. I. Kuliev and G. M. Nedlin	(T)	2102	2678
Adsorption and Electron Emission of Cesium Films on Iridium. N. D. Konovalov and V. I. Makukha	(E)	2108	2686
Theory of Light Absorption and Emission by Impurity Centers in Paramagnetic Crystals. M. A. Krivoglaz and G. F. Levenson	(T)	2114	2693
Linear Stark Effect in the U-Band of Ruby. A. A. Kaplyanskii and V. N. Medvedev	(E)	2121	2704
Magnetic Crystallographic Anisotropy of Indium-Substituted Yttrium Garnets. B. E. Rubinshtein and G. M. Galaktionova	(E/T)	2124	2707
Phonon Scattering by Distorted Lattices of Ionic Crystals Containing Nonstoichiometric Vacancies. I. I. Vishnevskii and V. N. Skripak	(E/T)	2129	2713

(Contd)

Available From American Institute of Physics  
Vol 9, No 9, March 1968

		PAGE	RUSS. PAGE
The Secondary Electron Emission (SEE) of Solids at Large Angles of Incidence of the Primary Beam. <u>I. M. Bronshtein and V. A. Dolinin</u> . . . . .	(E)	2133	2718
BRIEF COMMUNICATIONS			
Magnetic Reversal of "Hypercritical" Permalloy Films in an Alternating Magnetic Field. <u>A. N. Verkhozin</u> . . . . .	(E)	2141	2728
Absorption of Ultrasound by Dislocations in Deformed KCl Crystals. <u>Kh. M. Khalilov and A. I. Agaev</u> . . . . .	(E)	2143	2729
Electrical Resistance of Chromium near the Néel Point. <u>E. B. Amitin and Yu. A. Kovalevskaya</u> . . . . .	(E)	2145	2731
Dependence of the Intensity of Stimulated Mandel'shtam-Brillouin Scattering in Fused Quartz on the Excitation Intensity. <u>S. M. Ryvkin, V. M. Rysakov, I. M. Fishman, B. I. Shklovskii, and I. D. Yaroshetskii</u> . . . . .	(E)	2148	2735
Theory of Cyclotron Echo. <u>Ya. Ya. Asadullin and U. Kh. Kopvillem</u> . . . . .	(T)	2150	2737
Magnetic Ordering of Zinc Tungstate with a High Concentration of Manganese Impurity. <u>A. I. Zvyagin, V. A. Moiseev, and A. M. Pshisukha</u> . . . . .	(E)	2152	2739
Influence of Domain Structure on the Ferromagnetic Resonance in an Iron-Yttrium Garnet Single Crystal. <u>V. I. Churkin and N. N. Chelishchev</u> .	(E)	2154	2742
Formation of Excitons by Electrons in Thallium-Doped RbI Single Crystals. <u>Ch. B. Lushchik and T. I. Trofimova</u> . . . . .	(E)	2156	2744
Quantum Oscillations of Transport Coefficients of Mercury Selenide. <u>M. S. Bresler, S. A. Aliev, and S. S. Shalyt</u> . . . . .	(E)	2159	2746
Theory of the Interaction of Charged Particles with a Dielectric. <u>I. V. Ioffe</u> .	(T)	2161	2748
Forbidden-Band Width of PbSe at High Temperatures. <u>E. D. Devyatкова and V. A. Saakyan</u> . . . . .	(E)	2163	2750
Ground-State Energy of a Bound Polaron. <u>Yu. E. Perlin and Sh. N. Gifelman</u> .	(T/E)	2165	2752
Electric Strength of Al <sub>2</sub> O <sub>3</sub> Films. <u>V. F. Korzo</u> . . . . .	(E)	2167	2753
Influence of Plastic Deformation on the Magnitude of the Mössbauer Effect. <u>V. S. Kortov, R. I. Mints, and Yu. N. Sekisov</u> . . . . .	(E)	2169	2755
Theory of the Photoionization of F' Color Centers. <u>A. A. Berezin</u> . . . . .	(T)	2170	2756
Effect of Temperature on Gd <sup>3+</sup> Impurity Centers in SrF <sub>2</sub> . <u>F. Z. Gil'fanov, A. Kh. Karataeva, and A. L. Stolov</u> . . . . .	(E)	2172	2758
Longitudinal Relaxation at Simple Electron Levels of V <sup>3+</sup> Ions in Corundum. <u>V. N. Yastrebov</u> . . . . .	(E)	2174	2760

Available From American Institute of Physics  
Vol 9, No 9, March 1968

# SOVIET PLANT PHYSIOLOGY

A translation of *Fiziologiya Rastenii*

Volume 14, Number 5

September-October, 1967

## CONTENTS

	Engl./Russ.
Fifty Years of Soviet Plant Physiology (1917-1967) . . . . .	645 765
Influence of Retardants on the Growth and Flowering of Plants—M. Kh. Chailakhyan and V. G. Kochankov . . . . .	652 773
Analysis of the Effect of Chloramphenicol on Corn-Root Growth—V. B. Ivanov, N. V. Obrucheva, and T. K. Litinskaya . . . . .	661 785
Comparative Effect of Natural Growth Inhibitors, Narcotics, and Antibiotics on Plant Growth—V. I. Kefeli and R. Kh. Turetskaya . . . . .	670 796
Transformation of C <sup>14</sup> -Catechins after Introduction into Plants—M. N. Zaprometov and V. Ya. Bukhlaeva . . . . .	676 804
Transformation of Sugars Absorbed by the Leaf Tissues of Sugar Beets—A. L. Kursanov, M. I. Brovchenko, and E. P. Butenko . . . . .	684 813
Influence of Potassium Ions on Generation and Conduction of Action Potentials in the Vascular Bundles of Pumpkin ( <i>Cucurbita pepo</i> ) Stems—E. I. Vyskrebentseva and A. M. Sinyukhin . . . . .	692 823
Direct Action of ATP on the Absorptive Apparatus of Barley Roots—D. B. Vakhmistrov and M. P. Listova . . . . .	700 833
Iron-Containing Coenzyme a in the Photosynthetic Carbon Dioxide Acceptor—V. E. Zarin and E. A. Boichenko . . . . .	708 843
Activity of the Photosynthetic Apparatus and Nitrogen Metabolism in Plants —A. A. Nichiporovich, O. P. Osipova, M. K. Nikolaeva, E. G. Romanko, Kh. Ya. Khein, G. A. Slobodskaya, and Yu. V. Krylov . . . . .	713 849
Changes in the Rate of Photosynthesis by the Leaf Due to Factors Affecting the Root System—V. O. Kazaryan and V. A. Davtyan . . . . .	721 860
Photoenergetics of a Synchronous Chlorella Culture—L. N. Bell, E. A. Lin'kova, G. A. Slobodskaya, K. S. Spectorov, E. P. Fedenko, and G. S. Bukina . . . . .	726 866
Formation of the Membrane System of Chloroplasts Illuminated by Various Parts of the Spectrum—A. A. Shakhov, N. S. Balaur, and I. A. Kondurushkin . . . . .	731 872
Structural Changes in Mitochondria of Tobacco Leaves with Virus Infection —B. A. Rubin, Yu. V. Balnokin, and M. E. Ladygina . . . . .	739 880
Change in Structure and Composition of Aleurone Grains in Ripening Castor Beans —A. A. Prokof'ev, I. N. Sveshnikova, and A. M. Sobolev . . . . .	746 889
Effect of Drought on Protein Synthesis and the State of Ribosomes in Plants —P. A. Genkel', N. A. Satarova, and E. K. Tvorus . . . . .	754 898
Causes of Poor Cold-Resistance in Roots of Fruit Trees—I. I. Tumanov and N. N. Khvalin . . . . .	763 908
Metabolism of Succinic Semialdehyde and $\gamma$ -Aminobutyric Acid in Plants —V. L. Kretovich, T. I. Karyakina, and N. V. Lyubimova . . . . .	771 919
	(Contd)

Available from Consultants Bureau

BRIEF COMMUNICATIONS

Effect of Chloramphenicol on Protein Synthesis in Leaf Discs - O. N. Kulaeva and N. L. Klyachko . . . . .	778	926
Translocation and Transformation of the Defoliant BEXT in Plants - V. A. Kraft and K. S. Bokarev . . . . .	781	929
Absorption of Radioactive Phosphorus in Trunks and Branches of Fruit Trees during Winter Dormancy - R. V. Gittlits and E. A. Shishkin . . . . .	785	933

PRACTICAL APPLICATIONS

Ethylene as a Highly Effective Defoliant - Yu. V. Raktin . . . . .	789	936
--	-----	-----

METHODS

Isolation of Monospecific $\gamma$ -Globulin from Exhausted Immune Sera for Investigation of Proteins from Plant Cells - A. D. Volodarskii and N. G. Tikhonovskaya . . . . .	800	952
---	-----	-----

BOOK REVIEW

T. A. Kazeli - Vitamins in the Plants of Georgian SSR - Reviewed by K. E. Ovcharov . . . .	803	955
--	-----	-----

EVENTS

Fifth All-Union Conference on the Use of Trace Elements in Agriculture and Medicine - I. A. Burkin and G. Ya. Zhiznevskaya . . . . .	805	957
---	-----	-----

The Russian press date (podpisano k pechati) of this issue was 9/6/1967.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau



**GEODEZIYA I KARTOGRAFIYA**  
**No 3, 1967**

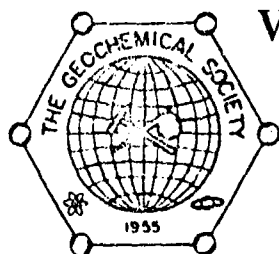
English Edition  
Geodesy and Aerophotography, No. 3, 1967

**CONTENTS**

	English Page	Russian Page
V.N. Gan'shin and M.S. Nesterenok: Evaluation of Standard Deviation Using Empirical Mean Square Error .....	139	3
S.G. Sharupich: Transformation of Condition Equations and Error Equations Using Different Bases of Linear Space .....	143	11
V.G. Nazarenko: Solution of Problems in Geodetic Adjustment by the Quadratic Programming Method ...	147	21
O.B. Sheynin and G.V. Plekhanov: History of Development of Adjustment Operations by the Indirect Measurements Method .....	149	25
Yu.M. Klimkov: Principal Parameters of Lasers for Use in Distance Measurements .....	152	33
Yu.A. Kryukov: The Accuracy of Initial Sides and Laplace Azimuths .....	157	41
Ye.K. Nikol'skiy and A.P. Bystrova: Trigonometric Leveling over Short Distances .....	159	45
M.V. Proferanova: Mechanization and Automation of the Fabrication of Scales and Circles for Reading Devices .....	161	49
A.K. Zaytsev: Group Adjustment of Microtrilateration Nets .....	163	55
I.S. Zhilenko: Effect of the Projection Matrix in the Least Squares Method .....	167	63
D.Sh. Mikhelev: Formulas for Calculating Horizontal Refraction during Geodetic Work in Enclosed Spaces	169	67
I.F. Kondrat'yev: Investigation of Gyrotheodolites .....	172	75
B.V. Krasnopevtsev: The Possibilities of Precise Rectification .....	178	87
G.Z. Skoblov: A Case of Rectangular Coordinate Rectification in Nontopographic Photogrammetry .....	181	95
B.A. Vul'fovich: Analysis of Distortions of the Modified International Projection .....	183	99
A.S. Vashut: Effect of Instruments and Apparatus on the Technology and Method of Preparing Map Compilations .....	188	111
Ye.I. Soldatkin and Yu.A. Skopintsev: Representation of the Transportation Net on a 1:1,000,000 Map ...	190	117
Ye.N. Kolosov: Some Problems in the Representation of Rural Populated Places on 1:25,000 Map .....	193	123
Ye.K. Krylova: Cartographic Generalization in the Process of Generalizing Small-Scale Geocryological (Permafrost) Maps .....	198	127
M.D. Mal'tsev: Diffraction Phenomena in Optical Systems .....	198	131
V.S. Plotnikov, G.A. Stepanova and A.S. Malakhov: Investigation of the Possibility of Using an Inversion Photocell in Coordinator and Angle-Transducer Systems .....	200	137
T.I. Yakushenkova: Laboratory Simulation of Stellar and Narrow-Band Emitter Radiation .....	204	145
M.A. Nekrasova: On the Elective Course in Foreign Language at the MIIGAik (Moscow Institute of Geodetic, Aerial Mapping and Cartographic Engineers) .....	208	151
Yuriy Aleksandrovich Gordeyev (Obituary) .....	207	155

English edition published, February 1968

Available From the American Geophysical Union



# GEOCHEMISTRY INTERNATIONAL

Vol. 3

1966

No. 6

Translated Articles from **ГЕОХИМИЯ** (1966)  
and other selected geochemical translations

Published by  
**THE GEOCHEMICAL SOCIETY**  
with the aid of a grant from the National Science Foundation

## CONTENTS

GEOKHIMIYA, NO. 11, 1966

*Ravich, M. I. Phase Equilibria in Supercritical Regions of Water-Salt Systems of P-Q Type (ABS) .....	1037
Naydin, D. P., R. V. Teys and I. K. Zadorozhnyy. Isotopic Paleotemperatures of the Upper Cretaceous in the Russian Platform and Other Parts of the USSR .....	1038
*Kogarko, L. N. Physical-Chemical Analysis of Cryolite Parageneses (ABS) .....	1052
Kapustin, Yu. L. Geochemistry of Rare-Earth Elements in Carbonatites .....	1054
*Komarov, A. N. and Yu. A. Shukolyukov. Forms of Uranium Occurrence in Micas (ABS) ..	1065
Naumov, G. B., A. I. Polyakov and A. A. Sergeyev-Bohr. Incorporation of Thorium in Micas ..	1066
*Safonova, G. F. Geochemical Criteria in Study of the Origin of North Karelian Micaceous Pegmatites (ABS) .....	1075
Vakhrushev, V. A. and V. M. Dorosh. Selenium and Tellurium Distribution in Sulfide Ore Deposits of the Altay-Sayan Region .....	1076
Brief Communications	
Artemov, Yu. M., K. G. Knorre, V. P. Strizhov and V. I. Ustinov. $Ca^{40}/Ca^{44}$ and $O^{18}/O^{16}$ Isotopic Ratios in Some Calcareous Rocks .....	1082
*Berlin, T. S. and A. V. Khabakov. Analytical Chemical Determination of the Ratio of Calcium and Magnesium in Bellemnoid Rostra as a Method of Estimating the Environmental Temperatures of Existence in Seas of the Cretaceous Period in the USSR (ABS) ..	1087
Brandt, S. B., B. V. Petrov and P. P. Kriventsov. Migration of Radiogenic Argon From Sylvite Under Stress .....	1089
Shcherba, G. N., G. M. Zamyatina, S. K. Kalinin and K. A. Mukhlya. Germanium in Some Greisens in Kazakhstan .....	1091
Baakov, S. T. and A. V. Rabinovich. The Geochemistry of Indium and Thallium in the Karamazar Ore Region (The Uzbek and Tadzhik Republics) .....	1095
Marchenko, Ye. Ya. and V. P. Shcherbakov. Notes on Gallium Distribution in the Granitoids of the Azov Sea Region .....	1102
Vorontsov, A. Ye. and N. G. Lin. Rubidium and Lithium in the Granitoids of the Bugul'min Complex (Eastern Sayans) .....	1108
Karpov, I. K. and S. A. Kashik. Thermodynamic Calculation of the Equilibrium Curve of Muscovite Dehydration .....	1117
GEOKHIMIYA, NO. 12, 1966	
Vinogradov, A. P., O. I. Kropotova, Yu. L. Orlov and V. A. Grinenko. Isotopic Composition of Diamond and Carbonado Crystals .....	1123
Senderov, E. E. and N. I. Khitarov. Conditions of Natrolite Formation .....	1126
Gerling, E. K., Yu. A. Shukolyukov, I. N. Tolstikhin and G. Sh. Ashkinadze. The Nature of the Isotope $Ar^{40}$ in Uranium-Containing Minerals .....	1140
*Grinenko, V. A. and M. S. Gazizov. The Nature of Sulfides in the Baltic Shale Basin From Sulfur Isotope Data (ABS) .....	1148
Chalov, P. I., K. I. Merkulova and T. V. Tuzova. The $U^{234}/U^{238}$ Ratio in the Water and Bottom Sediments of the Aral Sea and the Absolute Age of the Basin .....	1149
*Balashov, Yu. A. and A. Ya. Sharas'kin. Use of Seven Component Diagrams to Analyze Evolution in the Composition of Rare-Earth Elements in Natural Systems (ABS) ....	1157
*Ivanitskiy, T. V., N. D. Gvaramadze and T. D. Mchedlishvili. Distribution of Lead, Zinc and Copper in Metasomatically Altered Magmatic Rocks, As Exemplified by the Adzharian Intrusions in Georgia (ABS) .....	1158
*Efendiyev, G. Kh., Z. B. Abdullayev and E. E. Babayeva. Scandium in Ultrabasic Rocks of the Lesser Caucasus (Azerbaijan) (ABS) .....	1159
Gusel'nikov, V. N. and G. I. Volkov. Geochemistry of Iron Ores of the Mikhaylovka Deposit, Kursk Magnetic Anomaly .....	1160

(Contents Continued on Inside Front Cover)

(Contd)

Available From American Geological Institute

**GEOKHIMIYA**  
Vol 3, No 6, 1966

Contents (Continued)

Yegorov, I. N., Yu. N. Gannalaya and M. V. Mints. Zirconium Distribution in Rocks and Minerals of the Ukan Subalkalic Massif .....	1168
Koval'skiy, V. V. and S. V. Letunova. Biogenic Migration of Cobalt in Water Reservoirs .....	1176
Brief Communications	
Adyshev, M. M. and K. Ye. Kalmurzayev. Molybdenum Distribution in Cambrian-Ordovician Deposits of the Sary-Dzhaz Structural-Facies Subzone of the Tien-Shan .....	1187
Stavrov, O. D., E. I. Iovcheva and B. I. Zlobin. Distribution of Beryllium in Caledonian Granitoids of the North Tien-Shan .....	1190
*Merlin, T. S. and A. V. Khabakov. Mineralogical Composition of Upper Cretaceous Belemnite Rostra (ABS) ..	1193
Altyev, A. G., G. A. Aliyeva and D. G. Orlova. Distribution of $I_2$ , $Br_2$ , $NH_4$ and $B$ in Rock Solutions and Stratal Water of Oil Deposits in North Dagestan .....	1194
Ivanova, G. F. Spectrographic Determination of Molybdenum, Tin, Lead and Tungsten on the International Standard G-1 .....	1198
SELECTED ARTICLES	
Nukushov, K. N. and L. V. Nikishova. The Possibility of Reaction Relations Between Olivine and Monticellite ..	1200
Oleynikov, B. V. Infiltrational Metasomatism Around the Middle Reaches of the River Gorbachin .....	1207
Mel'nik, Yu. P. and M. A. Yaroshchuk. A Thermodynamic Analysis of the Formation Conditions of the Olivine-Magnetite Rocks and Ores of the Volodars' District of the Ukrainian Shield .....	1218
Belevtsev, Yu. N., Yu. M. Yepatko and K. A. Vorob'yeva. Conditions of the Accumulation of Iron and Silica in the Precambrian in Light of Experimental Data .....	1230
Pampura, V. D. Behavior of Rubidium, Lithium, Barium and Strontium in Wallrock Metamorphism of Granitoids (Taking as Examples the Molybdenum Deposits of the Eastern Transbaykal Region) .....	1244
Kozlov, V. D., Ye. A. Klepikova and L. N. Svadkovskaya. Distribution of Rubidium and Lead in the Potassium Feldspars of Granitoids in the Process of Magmatic Differentiation and Autometasomatic Alteration .....	1257
Vilenskiy, A. M. Phase Equilibria and Evolution in the Chemical Nature of the Pyroxenes of Intrusive Traps of the Siberian Platform .....	1275
Müller, Georg. The Relationship Between the Chemical Composition, Refractive Index, and Density of Some Coexisting Biotites, Muscovites, and Chlorites From Granitic Rocks .....	1307
Müller, Georg. The Effect of Various Substitutions on the Lattice Constants of Coexisting Biotites and Muscovites .....	1324
Errata .....	1335
Index to 1966 Volume .....	1336
Contents of 1966 Volume .....	1363

Translated by  
*Scripta Technica, Inc.*

\*Complete translations of these articles may be purchased from the American Geological Institute for the prices listed with the abstracts. Please cite document numbers.

A publication of the Geochemical Society, supported by a grant from the Office of Science Information Service, National Science Foundation.

Edited by  
Priestley Toulmin, III  
U. S. Geological Survey  
Washington, D. C., 20242

*Geochemistry International* contains selected articles from a cover-to-cover translation of *Geokhimiya*, a journal devoted to geochemistry, published by the Academy of Sciences, U. S. S. R., together with selected translated geochemical papers from other languages, but primarily from Russian, German, French, and Japanese. A list of periodical publications is regularly searched for papers of geochemical interest, and readers and subscribers will do the Editor a service by suggesting papers for consideration for translation and publication. Topical coverage is the same as that found in the Society's journal, *Geochimica et Cosmochimica Acta*, or in *TEOXXHMHIA*, and includes distribution of elements, geochronology, geochemical prospecting, biogeochemistry, geochemistry of hydrocarbons, phase equilibria studies, stable isotope distribution, wall rock alteration, zoning in ore deposits, paragenesis, petrology, and mineralogy.

Subscription rates: \$50 per year; \$10 per issue.

Foreign postage: \$1.25 per year.

Back volumes and issues of *Geochemistry International* (1964 and 1965) available at current subscription rates from the American Geological Institute.

Back volumes and issues of *Geochemistry*, the cover-to-cover translation of *TEOXXHMHIA* published separately (1956-1963) are available in limited numbers from the American Geological Institute at \$25 per volume and \$4 per issue.

Address inquiries to Subscription Manager  
(Remittance must accompany orders. Make payable to:)

**AMERICAN GEOLOGICAL INSTITUTE**  
1444 N Street, N.W., Washington, D. C. 20005

NOTE: Claims for free replacement copies will not be honored when the request is received more than sixty days after the mailing date or because of subscriber's failure to notify the Institute of a change of address.

Available From American Geological Institute

**TABLE OF CONTENTS**  
**Vol. 7, No. 4, 1963**

1. Time of formation of oil and gas pools. M. F. Svishchev . . . . .	p. 175
2. Formation of oil and gas pools in the reef zone of the Cis-Ural downwarp. V. A. Koshlyak and I. A. Yakupov . . . . .	p. 181
3. Use of phase-composition data in the system oil-gas at high pressures for ascertaining the genesis of some pools. T. P. Zhuze et al. . . . .	p. 186
4. Formation of oil pools in sandstone stratum B <sub>1</sub> of the Tula horizon of the Zhirnov and Bakhmet'yev fields. T. L. Vesnina . . . . .	p. 191
5. Final products of the conversion of oil in the absence of oxidizing agents. P. F. Andreyev . . . . .	p. 195
6. Bitumen formation in fresh-water sediments. V. V. Veber and A. I. Gorskaya . . . . .	p. 200
7. Carbon-bitumen coefficient as a soil-geochemical index of oil and gas at depth. N. B. Vassoyevich and I. S. Kovacheva . . . . .	p. 207
8. Organic matter of Oligocene-Miocene sediments of the Caspian-Kuban region. Sh. F. Mekhtiyev and Ad. A. Aliyev . . . . .	p. 215
9. Age to the diapiric structures of the east part of the Dnieper graben. V. D. Kogan and V. I. Andreyeva . . . . .	p. 223
10. Method of spatial observations of RNP under the conditions of the reef zone of the Orenburg Cis-Urals. I. A. Mushin . . . . .	p. 229
11. Review of symposium "Theoretical Problems of Petroleum Geology". K. F. Rodionova . . . . .	p. 234

- \* - \* - \* -

**PETROLEUM GEOLOGY**  
P. O. Box 171  
McLean, Virginia  
22101

Translator and Publisher  
Dr. James W. Clarke

Technical Editor  
Grace Carrington

Editorial Assistant  
Antoinette B. Clarke

Published monthly  
\$25.00/yr. (12 issues)

Published on a non-profit basis in the interest of geological science

Available From Petroleum Geology

TABLE OF CONTENTS

No. 10, October 1965

	Page
List of Abbreviations . . . . .	xv
T. Yuldashev. Maximum Permissible Concentration of Ethylene Oxide in the Atmosphere . . . . .	1
S.A. Davydov. Certain Physiological Changes in Children Exposed to Atmosphere which has been Polluted by Cement Works . . . . .	7
V.A. Knizhnikov, O.I. Belousova, and V.A. Grozovskaya. Effect of Flouridated Water on Hemopoiesis . . . . .	12
E.L. Minkin. Determining the Boundaries of the Second Zone of Sanitary Protection for Isolated Groundwater Reservoirs (Artesian Aquifers) of Unlimited Groundwater Flow. . . . .	16
A.Z. Zakhidov and Sh.T. Atabaev. Contamination of Soil and Water by Agricultural Poisonous Chemicals in Uzbekistan . . . . .	28
V.V. Podosinovskii. Toxicity of Industrially Used Indium Compounds . .	32
I.A. Gribova and E.A. Solov'eva. Reactions of the Hemopoetic System to Occupational Exposure to Vibration and Noise . . . . .	39
N.V. Lukasheva, A.P. Martynova, and T.V. Solov'eva. A Chemico-hygienic Characterization of Volatiles Liberated by the Thermal Treatment of "Polyphen" Fiber. . . . .	43
Z.Z. Ashbel'. Hygienic Aspect of the Working Conditions Involved in Industrial Applications of Ultrasound . . . . .	48

(Contd)

Available From CFSTI TT 66-51033-4

	Page
V. N. Ksenofontov. The Effect of School Work on the Functional State of the Nervous System in a School for Children with Impaired Vision . . . . .	54
A. A. Malygin. Certain Aspects of Industrial Hygiene in the Mining of Radioactive Ores . . . . .	60
A. I. Nesterenko. Contribution to the History of Soviet Public Health Education . . . . .	70
L. S. Gurvich. F. F. Erisman and Certain General Aspects of the Development of Hygiene (on the Occasion of the Fiftieth Anniversary of the Death of the Outstanding Russian Scientist) . . . . .	73

#### METHODS OF INVESTIGATION

M. I. Poletaev. Colorimetric Determination of Small Amounts of Indole in Air . . . . .	76
F. G. Dyatlovitskaya and E. F. Gladenko. Separate Determination of Volatile Phenols by Paper Chromatography . . . . .	77
G. P. Kalina. An Elective Polymyxin Medium for the Isolation and Quantitative Determination of Enterococci in Fecal Masses and Environmental Objects . . . . .	81
G. M. Obaturov and A. K. Zabavin. Determination of Cumulative Absorbed Dose in Internal Irradiation . . . . .	84

#### PUBLIC HEALTH ADMINISTRATION AND STATISTICS- TRAINING OF PUBLIC HEALTH PERSONNEL

I. A. Trutnev and K. M. Filipovskaya. Some Methods of Teaching the Course in Environmental Hygiene . . . . .	93
R. D. Gabovich. Some Experience in Teaching the Course in Environmental Hygiene . . . . .	94

(Contd)

Available From CFSTI TT 66-51033-4

V.V. Ermakov, V.N. Dodonov, and G.N. Sobolevskii Students' Summer Practical Work Between the Fourth and Fifth Years . . . . .	97
---	----

**FIELD REPORTS**

F.G. Mel'ster, S.L. Dubrovskii, V.P. Dumko, and A.M. Orlovskaya. Reduction of Atmospheric Pollution in Tashkent . . .	101
S.A. Kotik. Hygienic Characterization of the Manual Cupless Pump BN-10 . . . . .	104
A.F. Soklakov and N.S. Pakhotina. Hygienic Assessment of Engineering Improvements at a Lead Works . . . . .	105
L.S. Bulavenko. A Case of Poisoning with Ornamental Beans . . . . .	108
I.I. Gusarov and Kh. O. Lev. Operation of Large Radon Laboratories at Sochi . . . . .	109

**ABROAD**

S.N. Cherkinskii. Pollution of Water Basins in the U.S.A. and the Government Network for Supervising the Quality of Water . . . . .	115
--	-----

**DISCUSSIONS AND READERS' COMMENTS**

V.A. Chizhikov. Functional EEG in Studies of the Effect of Imperceptible Concentrations of Dangerous Pollutants . . . . .	119
--	-----

**COMMUNICATIONS IN BRIEF**

G.R. Gemke and N.S. Pakhotina. Effect of the Discharges from Enterprises of Nonferrous Metallurgy on Arterial Pressure . . . . .	123
---	-----

(Contd)

Available From CFSTI TT 66-51033-4

E. M. Shtarkas, I. P. Slavina, and L. V. Rozentalene. Artificial Replenishment of Underground Waters . . . . .	125
V. V. Sergeev. Survival of E. coli, Enterococcus and B. typhi in Nonchlorinated Water . . . . .	127
G. N. Chistovich, L. I. Adel'son, S. P. Ivanova, V. V. Il'in, R. V. Kibort, L. M. Lyabina, A. M. Moguchii, E. A. Nechaeva, E. M. Paderina, A. M. Smirnova, S. V. Shandurin, and G. S. Yakovleva. Experience of Comprehensive Sanitary and Microbiological Evaluation of Sewage Irrigation Fields in the Suburbs of Leningrad . . . . .	129
Accumulation in the Human Body of DDT Ingested with Food, and its Toxic Effects . . . . .	132
V. S. Sergeev, Z. V. Zabelina, V. N. Pankratova, and A. V. Molodyakova. Sanitary-bacteriological Characteristics of Clean Tableware at Restaurants, Lunchrooms, etc. . . . .	132
A. P. Borisov. Energy Expenditure of Students of 9-10th Grades of a Boarding School . . . . .	135
M. Sh. Vainberg and A. V. Terman. Radioactive Contamination of the Heads of Gamma Units and Its Hygienic Assessment . . . . .	138
N. F. Kramchaninov and F. V. Popova. Material on the History of Medical Aid to Industrial Workers in Russia (A Paper on "Morbidity among Workers in the Calico Mill at Shlisselburg" Written by the Physician K. Balanovskii in 1801) . . . . .	142

CONGRESSES • MEETINGS • CONFERENCES •  
 SCIENTIFIC SOCIETIES

Yu. V. Novikov. Joint Meeting of the Sanitary-hygienic Commission of the Scientific Medical Council of the Ministry of Health of the R.S.F.S.R. and the Plenary Session of the Central Committee of the All-Russian Society of Hygienists and Sanitary Physicians . . . . .	146
L. I. Los' and G. A. Abramovich. Work of the Saratov Branch of the All-Russian Society of Hygienists and Sanitary Physicians . . . . .	149

(Contd)

Available From CFSTI TT 66-51033-4



	Page
Ya. M. Grushko. Activities of the Irkutsk Branch of the All-Russian Society of Hygienists and Sanitary Physicians . . . . .	150
A. Z. Zakhidov. Activities of the Journal "Hygiene and Sanitation" in 1964 . . . . .	151
 <b>OBITUARY</b> 	
In Memoriam: S. V. Kurashov . . . . .	153
 <b>ANNIVERSARIES</b> 	
Professor L. I. Mats's 70th Birthday . . . . .	157
V. M. Zhabotinskii's 70th Birthday . . . . .	158
 <b>BOOK REVIEWS</b> 	
I. A. Arnol'di. Problems of Occupational Pathology.— A. P. Shitskova, Ed. . . . .	160
V. N. Kardashenko and E. P. Stromskaya. Hygienic Problems of the Boarding School.— S. M. Grombakh, Ed. . . . .	161
E. A. Timokhina and O. V. Kaisina. Health Protection for Children and Adolescents.— D. N. Kalyuzhnyi and S. S. Poznanskii, Eds. . . . .	162
I. I. Belyaev. Performance of Gravelless Contact Clarifiers.— Yu. I. Kolodnyi . . . . .	164
A. N. Marei. Studies of the Geographical Distribution of Biogeochemical Endemics.— V. M. Meshchenko . . . . .	165
CURRENT EVENTS AND INFORMATION . . . . .	168 (Contd)

Available From CFSTI TT 66-51033-4

Ts. S. Kristesashvili. The Maximum Permissible Concentration of Pyridine in the Air . . . . .	173
A. V. Smol'skii. The Experimental Determination of the Maximum Permissible Concentration of 1,2-Dichlorohexafluorocyclopentene-1 in Water Bodies . . . . .	177
Yu. N. Talakin. The Experimental Determination of the Maximum Permissible Concentration of $\alpha$ -Naphthoquinone in Water Resources . . . . .	184
Yu. B. Shafirov. The Determination of the Maximum Permissible Concentration of Strontium in Water . . . . .	190
I. A. Kibal'chich, A. I. Ul'yanov, and G. M. Erdman. A Sanitary Investigation of the Angara River and the Bratsk Reservoir with a Deepwater Conductometer . . . . .	196
E. V. Shtannikov. The Destruction of Viruses in Water by Means of Ion-exchange Polymers . . . . .	203
S. V. Miller, P. G. Simakhina, N. M. Gorlancva, E. V. Gotlib, A. V. Chesnokova, and P. S. Starkov. Fluorine Balance in the Electrolytic Manufacture of Aluminum and Its Hygienic Significance . . . . .	209
D. I. Kaganovich. The Physiological Establishment of Production Norms for Adolescent Trainees in the Radio Industry . . . . .	215
A. Ya. Polyakov. Some Physiological Aspects of the Conditions Under Which Young People are Trained as Cooks . . . . .	220
A. V. Bykhovskii, M. O. and O. M. Zareev. Observations on Hot Radioactive Particles in the Atmosphere During 1962-1964 . . . . .	225
F. I. Pavlotskaya, E. B. Tyuryukanova, E. V. Babicheva, L. N. Zatsepina, and V. I. Baranov. The Determination of Strontium-90, Stable Strontium and Calcium in Soils and in Edible Plants . . . . .	234
R. V. Gorskaya. A New Photocolorimetric Method for the Determination of Naphthalene in Air . . . . .	243

(Contd)

Available From CFSTI TT 66-51033-4

	Page
I. A. Pinigina. The Separation and Determination of Aliphatic Alcohols in Air by Paper Chromatography . . . . .	244
N. S. Zheleznyakova and E. P. Gal'chenko. Studies of Metabolic Processes in the Field of Child and Adolescent Hygiene . . . . .	249

**PUBLIC HEALTH ADMINISTRATION AND STATISTICS·  
TRAINING OF PUBLIC HEALTH PERSONNEL**

The Main Research Findings in the Field of Child and Adolescent Hygiene in 1964 (Extract from the Report by the Project Commission) . . . .	253
G. P. Zarubin. The Organization of Field Research at a Sanitary-epidemiological Center . . . . .	257

**FIELD REPORTS**

D. A. Selidovkin, A. M. Biryukov, V. V. Avdal'yan, and A. M. Dzhumadylov. The Chlorination of Water in Wells by Means of Dosing Cartridges . . . . .	260
L. I. Lomina and L. A. Vorontsova. The Systematic Chlorination of Well Water . . . . .	263
L. F. Ovchinnikova, G. O. Petrova, and R. B. Khanina. A Hygienic Assessment of the Working Conditions of Women Workers at a Dairy Shop . . . . .	268
A. P. Krupina, V. S. Vitivker, A. V. Ozerets, and K. M. Panova. A Case of Botulism Caused by Home Preserved Mushrooms . . . .	266

**REVIEWS**

N. V. Petrukhin, S. I. Pokrovskii, V. K. Tikhomirov, and V. G. Ryadov. The Determination of Radiocesium in Environmental Objects . . . . .	270
--	-----

(Contd)

Available From CFSTI TT 66-51033-4

DISCUSSION AND READERS' COMMENTS

B.M. Shtabskii. The Interpretation of Haldane's Experiment on the Toxic Properties of Carbon Monoxide . . . . .	277
A.P. Pronin. Permissible Levels of Industrial Noise (Some Observations on the Old and New Standards) . . . . .	280
I.A. Arnol'di. The Effect of Toxic Chemicals on Adolescent Workers . . . . .	284

COMMUNICATIONS IN BRIEF

T.E. Nagibina and K.P. Ershova. Efficiency of the Purification of Water from Petroleum Products at Waterworks . . . . .	289
I.A. Veldre, L.A. Lakhe, and I.Kh. Arro. Content of 3,4-Benzpyrene in the Sewage Effluent of the Shale-processing Industry . . . . .	291
P.I. Barannik, I.A. Mikhalyuk, R.P. Mnatsakanyan, I.N. Tsvetkova and G.S. Yatsula. The Presence of Certain Trace Elements in Surface and Underground Waters in Kiev . . . . .	294
G.Kh. Ripp. The Dosing of Gas for the Experimental Determination of Maximum Permissible Concentrations . . . . .	297
V.E. Lyubutova, A.M. Chistyakova, V.D. Vankhanen, A.I. Leznik and A.A. Artemov. An Outbreak of Staphylococcal Food Poisoning . . . . .	299
Sh.I. Akhmedova. The Preservation of Different Serotypes of B. coli in Sansages . . . . .	301
M.A. Alfer'eva. The Epidemiology of E. coli Infections . . . . .	304
V.M. Zorin and E.I. Kabishcher. The Effect of Atmospheric Precipitation on Radioactive Fallouts . . . . .	306
V.N. Kirichenko, B.I. Ogorodnikov, V.D. Ivanov, A.A. Kirsh, and V.I. Kachikin. Submicroscopic Aerosols of Short-lived Daughter Products of Radon in Mine Air . . . . .	308
	(Contd)

Available From CFSTI TT 66-51033-4

BOOK REVIEWS

B.B. Koiranskii. A Textbook of Occupational Hygiene. Principles of General Occupational Hygiene. Vol. 2.— Z.I. Izrael'son and Z.B. Smelyanskii. Eds. . . . .	315
G.M. Egiazarov. Nutrition and Food Hygiene.— K.S. Petrovskii . . .	317
N.A. Bogoyavlenskii. From the Editorial Board . . . . .	319
CURRENT EVENTS AND INFORMATION . . . . .	323

No. 12, December 1965

M.A. Nevstrueva. Some Problems of Radiation Hygiene . . . . .	327
I.S. Gusev. Reflective Effects of Microconcentrations of Benzene, Toluene, Xylene and Their Comparative Assessment . . . . .	331
K.G. Basmadzhieva-Tancheva. Resorption of Calcium in the Intestine, Purine Metabolism and the Distribution of Ca <sup>45</sup> in the Organs and Tissues of Rats which had Ingested Water with Different Calcium Contents for Prolonged Periods . . . . .	336
A.Z. Zakhidov, L.B. Shraiber, I.V. Gol'eva, L.A. Katsenovich, and A.P. Samsonov. Occupational Pathology at Factories Processing Cotton and Ambari . . . . .	344
Yu. S. Chernyaev. Permeability of Human Skin to Infrared Radiation .	347
R.F. Afanas'eva and L.P. Fedorova. Effect of the Number of Garment Layers on Thermal Insulation . . . . .	353
L.V. Grigor'eva, A.S. Gorodetskii, T.G. Omel'yanets, and L.A. Bogdanenko. Survival of Bacteria and Viruses on Vegetable Crops Irrigated with Infected Water . . . . .	357
T.A. Makova. Hygienic Standards for the Classrooms and for Their Equipment in Boarding Schools for Blind Children . . . . .	362

(Contd)

Available From CPSTI TT 66-51033-4

	Page
G.A. Sevryukova . Optimum Air Temperature in the Music Room and Gymnasiums of Preschool Institutions . . . . .	368
A.P. Ermolaeva-Makovskaya, L.A. Pertsov, and D.K. Popov . Polonium-210 in Tobacco . . . . .	373
E.I. Lotova . Centennial of the First Appearance of the Journal "Arkhir Sudebnoi Meditsiny i Obshchestvennoi Gigieny" . . . . .	378
B.D. Petrov . "Free Economic Society" and the Development of Hygiene in Russia (on the Bicentenary of Its Foundation) . . . . .	382

**METHODS OF INVESTIGATION**

G.A. Parsadanyan . Instrument for Rapid Determination of Health Hazards in Air Using Test Paper . . . . .	385
A.A. Ivanov . Studies of the Bactericidal Properties of Skin in a Toxicological Experiment . . . . .	386
A.I. Kopanov . Vital Staining of Tissues in Establishing Standards of Atmospheric Pollutants . . . . .	390
R.V. Gorskaya . Determination of Pyridine in Air . . . . .	393
G.F. Vylegzhanina . Chromatographic Separation of Chlorophos and DDVF in a Commercial Preparation of Chlorophos and in a Plant Sample . . . . .	396
T.P. Chaika . Rapid Approximate Determination of Vitamin C in the Control of C-Vitaminization of Cooked Food . . . . .	399
M.M. Balashov . Inspection of the Cleanliness of Tableware at Catering Establishments . . . . .	402

**PUBLIC HEALTH ADMINISTRATION AND STATISTICS •  
TRAINING OF PUBLIC HEALTH PERSONNEL**

A.A. Pershin . Principal Results and Prospects of the Development of Scientific Work Executed at the Department of Hygiene of the Medical Institute in the R.S.F.S.R. . . . .	404
---	-----

(Contd)

Available From CFSTI TT 66-51033-4

FIELD EXPERIENCE	Page
I.M. Trakhtenberg. "Mercury Danger" and Its Prevention in Secondary Schools . . . . .	411
V.P. Golevchenko and A.F. Babich. Assessment of the Results of Bacteriological Investigations of Washings . . . . .	414

DISCUSSIONS AND READERS' COMMENTS	
V.K. Navrotskii. Should Hygienists Study the State of Immunity in Relation to Chemical and Physical Environmental Factors? . . . .	416
P.E. Kalmykov. A Further Contribution to the Problem of Assessing the Chemical Composition of Drinking Water . . . . .	421
A.V. Terman and R.V. Stavitskii. The Checking and Calculation of Protection in X-ray Rooms of Therapeutic Institutions . . . .	424

COMMUNICATIONS IN BRIEF	
F.F. Zigmund and E.Z. Chasovskii. Elimination of Formaldehyde from Ventilation Discharges in a Foam Apparatus . . . . .	428
E.F. Kononova, E.A. Mozhaev, I.V. Nazarenko, and A.A. Tyutina. Sanitary Protection of Water Basins Against Pollution with Sewage from the Manufacture of Polyacrylate Resins . . . .	431
S.E. Shapiro and M.I. Zelenskaya. Botulism in the Khabarovsk Area . . . . .	433
P.M. Malkin and Z.V. Dubrovina. Effect of Phosphorus on the Assimilation of Radiostrontium . . . . .	436

(Contd)

Available From CFSTI TT 66-51033-4

**CONGRESSES · MEETINGS · CONFERENCES ·  
 SCIENTIFIC SOCIETIES**

<b>Yu. V. Novikov . Problems of Rural Hygiene (Field Session of the              Academy of Medical Sciences of the U.S.S.R. (Saratov, 8-12 June              1965)). . . . .</b>	<b>439</b>
<b>L.I. Maksimova . Joint Meeting of the Central Committee of the All-              Russian Society of Hygienists and the Scientific Council of the              Erisman Research Institute of Hygiene (Moscow) with the              Participation of Representatives of the Scientific Society of              Cardiologists . . . . .</b>	<b>446</b>
<b>V.F. Katsitadze . A Readers' Conference on the Activities of the              Journal "Hygiene and Sanitation" . . . . .</b>	<b>447</b>

**REVIEWS**

<b>Z.G. Frenkel' and T.S. Soboleva . Vital Statistics of the U.S.S.R. .</b>	<b>449</b>
---	------------

**BOOK REVIEWS**

<b>I.A. Arnol'di and I.D. Kartsev . Occupational Medical              Consultation for Adolescents.- V.M. Levin and E.S. Rutenberg . .</b>	<b>453</b>
<b>I.I. Belyaev . Hygienic Aspects of Water Supply for Rural              Settlements.- S.N. Cherkinskii . . . . .</b>	<b>455</b>
<b>From the Editorial Board . . . . .</b>	<b>458</b>

**Available From CFSTI TT 66-51033-4**



CONTENTS

	Page
<i>Dragan S. Veselinović and Milenko V. Šulić:</i> Complex Compounds of <i>l</i> -Ascorbic Acid and Metal Ions. III. Determination of the Composition and Stability Constants of Lead and Aluminum Complexes in Acid Media by means of pH-Me- tric Titrations . . . . .	5
<i>Milutin Stefanović, Aleksandar Jokić and Mihailo Lj. Mihailović:</i> Preparation of Bromohydrins of $\Delta^4$ -Steroids by means of <i>N</i> -Bro- mosuccinimide . . . . .	15
<i>Miroslava M. Jančevska:</i> Synthesis of 4'-Hydroxy-5-Bromo-2-Thiofuranilide . . . . .	23
<i>Vilim J. Vajgand and Todor J. Todorovski:</i> Interferometric Titrations of Acids and Bases in Water and Gla- cial Acetic Acid . . . . .	27
<i>Olivera Ž. Pavlović and Sreten N. Mladenović:</i> Indirect Coulometric Titrations. Part I. The Determination of Zinc . . . . .	39
<i>Zora T. Blagojević, Kosta I. Niholić, and Radomir B. Popović:</i> Coulometric Determination of Some Sulfonamides . . . . .	43
<i>Srbobran R. Rajić:</i> Spectrochemical Analysis of Impurities in Graphite . . . . .	47

Available From CFSTI TT 66-59000-3

**IZVESTIYA AN SSSR, ATMOSFERY I OKEANOLOGICHESKIY**  
**Vol 3, No 7, 1967**

	Page	
	English	Russian
SH. A. MUSAEL'YAN, Solution of Some Inverse Problems of Satellite Meteorology Using a Diagnostic Equation of Atmospheric Dynamics . . . . .	387	675-687
G. P. KURBATKIN, A Nongeostrophic Effect of Planetary-Scale Motions . . . . .	394	688-698
G. V. ROZENBERG AND G. I. GORCHAKOV, The Degree of Ellipticity of the Polarization of Light Scattered by Atmospheric Air as a Tool in the Investigation of Aerosol Microstructures . . . . .	400	699-713
A. P. IVANOV AND I. L. KATSEV, Scattering of a Light Impulse in a Semi-Infinite Layer . . . . .	408	714-723
V. E. ZUEV, M. V. KABANOV, B. A. SAVEL'EV, The Limits of Applicability of the Bouguer Law in Scattering Media for Collimated Light Beams . . . . .	414	724-732
N. G. BELEKHOVA AND I. L. KAROL', On the Theory of the Propagation of Radioactive Emanations in the Atmospheric Ground Layer . . . . .	419	733-740
M. N. KOSHL'YAKOV, Application of the Reservoir Method to a Study of Water-Exchange Processes and the Dynamics of Strontium 90 in the Upper Layers of the North Atlantic . . . . .	424	742-756
YU. A. IVANOV, On the Relationship between the Heat Exchange Processes at the Surface of the Ocean and the Precipitation-Evaporation Balance . . . . .	433	757-763
Short Communications		
I. B. RUSSMAN, Radiation Transfer with Reflection from the Boundaries of the Atmosphere . . . . .	437	764-767
K. E. YAKUSHEVSKAYA, The Effect of Refraction on the Intensity of Long-Wave Outgoing Radiation . . . . .	439	768-772
S. G. MALAKHOV AND V. N. BAKULIN, The Effect of Variations in Exhalation of Radon and Thoron upon Changes in the Concentration of these Emanations and their Decomposition Products in the Atmosphere . . . . .	443	773-779
ANONYMOUS (A GROUP OF COMRADES), Foma Faddeevich Yudalevich . . . . .	448	780-781
Discussion		
L. R. ORLENKO, On the Equilibrium Temperature Gradient . . . . .	449	782-789
L. R. TSVANG (ZWANG) AND YU. A. VOLKOV, On the Temperature Gradients for which the Heat Flux Becomes Zero . . . . .	455	790-792
F. N. SHEKHTER (SCHACHTER), Problem on the Equilibrium Gradient . . . . .	458	793-794
ANONYMOUS, Discussion of the Problem of the Equilibrium Temperature Gradient . . . . .	460	795-799

Available From The American Geophysical Union

English Edition Published January 1968

CONTENTS

	Page	
	English	Russian
L. M. BALAKINA, A. V. VVEDENSKAYA, L. A. MISHARINA, AND E. I. SHIROKOVA, The Stress State in Earthquake Foci and the Elastic Stress Field of the Earth . . . . .	333	3-15
V. N. GAIJSKII, Determination of the Recurrence Rate of Earthquakes by Means of a Seismic Activity Map . . . . .	343	16-27
I. M. YAVORSKAYA, The Scattering of High-Frequency Plane Longitudinal Waves Obliquely Incident on Cylinders . . . . .	350	28-38
A. K. YANOVSKI, A Statistical Seismogram Model and the Filtration Problem . .	356	39-44
I. S. FAIZULLIN AND A. M. EPINAT'EVA, Reflected and Head Waves from Thin Layers in Solid Three-Dimensional Models . . . . .	360	45-55
V. N. STRAKHOV, Incorrectly Posed Problems of Magnetometry and Gravimetry Expressible as Convolution Integral Equations of the Second Kind . . . . .	367	56-71
I. D. SAVINSKI, Solution of an Improperly Posed Problem in the Continuation of a Potential Field to Subjacent Levels . . . . .	375	72-92
T. I. KOROLYUK, On One Technique for the Numerical Analytical Continuation of Potential Fields . . . . .	386	93-98
L. E. SHOLPO, Regularities and Methods of Study of the Magnetic Viscosity of Rocks . . . . .	390	99-116
Scientific Communications		
N. K. BULIN, Dynamic Characteristics of Deep Seismic PS Waves of Central Asia . . . . .	400	117-125
V. A. CHERNYSHEV, A Vertical Torsion Balance as a Probe for Measure- ment of Elements of the Gravitational Field during Motion . . . . .	407	126-129
M. G. KOGAN (COHEN), An Investigation of the Recording Spectrum of a Gal-P Marine Gravimeter . . . . .	410	130-133
V. S. PECHNIKOV, On the Time Variation of Magnetic Viscosity . . . . .	413	134-136
F. YANAK AND I. UMAN, The Distribution Function of Magnetic Susceptibilities .	416	137-143

Available From The American Geophysical Union

English Edition Published January 1968

Table of Contents	Page Orig. Trans.	
Transactions of the Third All-Union Symposium on the Physics of Thin Ferromagnetic Films		
Effect of temperature on pulse switching processes in thin ferro- magnetic films - R.V.Telesnin, T.N.Letova & B.F.Mochalov	358	345
Observation of switching of thin films by means of a stroboscopic transmission electron microscope - V.I.Petrov, G.V.Spivak & O.P.Pavlyuchenko	362	349
Dependence of the nucleation field at the edge of a Permalloy film on the dimensions of the film spot - E.N.Il'icheva, N.G. Kanavina & A.G.Shishkov	366	356
An analytic expression for the Néel wall energy - O.A.Vinogradov	370	360
On measurement of the anisotropy field of thin ferromagnetic films by the radio-frequency loss method - B.M.Abakumov	378	369
Effect of magnetic anneal on the uniaxial anisotropy of Permalloy films - B.M.Abakumov, N.A.Yankina & V.P.Shumkov	380	371
Measurement of the substrate temperature during film deposition and the effect of the substrate temperature on the properties of magnetic films - B.M.Abakumov, I.G.Orlov & N.A.Yankina	383	374
Use of magnetic films in holography - L.M.Klyukin, N.M.Pomerantsev & V.A.Fabrikov	386	377
Reversible rotation of the magnetization in thin magnetic films - E.S.Ziborov, Yu.V.Starostin & R.V.Telesnin	392	383
Switching of coupled strips of thin ferromagnetic films along the easy direction - A.K.Baranov & Yu.K.Ibaev	396	387
Stability of the magnetic structure of films as regards the action of pulsed orthogonal fields - M.I.Grishechkin & N.M.Sharunenko	402	393
Concerning switching of thin iron-nickel films along the easy axis in fields appreciably exceeding the threshold field for nonuniform rotation - R.V.Telesnin, O.S.Kolotov, T.N.Letova & V.A.Pogozhev	404	396
Demagnetization of thin ferromagnetic films by alternating fields of different frequencies - A.Ya.Beten'kova, P.S.Galepov & R.E. Ershov	407	398
Static and pulse properties of local sections of thin magnetic films - N.M.Salanskii, A.L.Logutko & L.A.Salanskaya	410	401
Galvanomagnetic effects in cobalt films - Wu ding Ke	414	405
Concerning the spin-wave theory of thin ferromagnetic films - A.I.Nitsek	418	411
Concerning the mechanism of formation of internal macrostresses in vacuum condensates - M.Ya.Fuks	422	415
Low-frequency ferromagnetic resonance - N.M.Salanskii, B.P.Khrustalev & Z.I.Sinegubova	429	422
Investigation of pulse switching of thin magnetic films - N.M.Salanskii, A.L.Logutko, G.I.Frolov & Yu.V.Utkin	432	426
Reasons for formation of fine magnetic structure in the domains of thin ferromagnetic films - R.V.Sukhanova, V.G.Pyn'ko & N.I.Sivkov	435	429

(Contd)

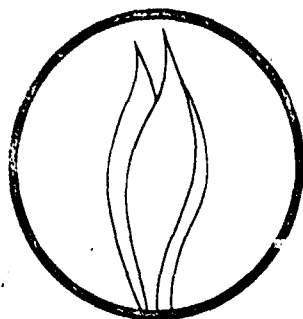
Columbia Technical Translations

Pulse switching of single-crystal ferrite films - G.I.Frolov, N.M.Salanskii, Ya.A.Zaionchkovskii, V.V.Lyukshin, B.P.Trubitsyn & Yu.V.Utkin	422 435
Magnetic properties of electrochemical films - V.A.Elmanova	445 439
Motion of the magnetic moment in a rotating magnetic field. Part I. Partial switching of thin ferromagnetic films - N.M.Salanskii & A.I.Pol'skii	448 442
Motion of the magnetic moment in a rotating magnetic field. Part II. Subharmonic oscillations - A.I.Pol'skii & N.M.Salanskii	452 446
Super-high frequency properties of thin magnetic films - N.S. Chistyakov & B.P.Tushkov	456 450
Anisotropy of thin ternary-alloy ferromagnetic films - S.G.Rusova, N.S.Chistyakov, B.P.Tushkov, G.I.Rusov & E.J.-R.Ludwig	460 454
Effect of dispersion of the anisotropy on magnetization increments in thin films near saturation - N.S.Chistyakov, N.M.Salanskii & B.P.Tushkov	463 457
Ferromagnetic resonance in thin magnetic films - G.I.Rusov, V.G. Pyn'ko & A.A.Nedel'ko	466 460
Automatic noise subtracting attachment for a gated oscillograph - V.A.Pogozhev & I.I.Yudin	473 467
Electron diffraction determination of the coefficients of thermal expansion of thin films - L.S.Palatnik, A.T.Pugachev, B.T.Boiko & V.M.Bratsykhin	478 472
Regarding change of the coercive force of ferromagnetic films incident to transition to the "supercritical" state - L.S.Palatnik, A.G. Ravlik & S.T.Roshchenko	482 476
Growing single-crystal films of iron, nickel, cobalt and their alloys - V.G.Pyn'ko, A.S.Komalov, M.A.Ovsyannikov, S.G.Rusova & E.J.-R.Ludwig	485 480
Investigation of ferromagnetic resonance in thin nickel and Permalloy films - A.N.Pogorelyi & A.P.Marchenko	492 488
Interaction of the magnetic system of a ferromagnet with the radiation field - V.A.Ignatchenko, L.V.Mikhailovskaya & R.G.Khlebopros	498 494
Investigation of the critical switching curves of Permalloy films - V.N.Pushkar' & A.G.Lesnik	502 498
Influence of the preparation and magnetic heat treatment conditions on the internal isotropic stresses in films - A.G.Lesnik, G.I.Levin & A.N.Pogorelyi	508 504

Columbia Technical Translations

---

Translated in 1968 by  
Columbia Technical Translations,  
5 Vermont Ave., White Plains, N.Y. 10606



# Soviet Radio Engineering

The Faraday Press cover-to-cover  
translation of *Izvestiya VUZ. Radiotekhnika*

## Contents

Volume 9, Number 2 • March - April 1966

Editorial Board  
*Izvestiya VUZ. Radiotekhnika*  
a publication of the  
Higher Educational Institutes USSR

V. V. Ogievskii,  
Editor-in-Chief  
Ya. K. Trokhimenko,  
Associate Editor  
Yu. T. Velichko  
N. F. Vollner  
L. N. Kolesov  
I. V. Lebedev  
Yu. S. Lezin  
E. I. Manaev  
M. S. Neiman  
A. V. Netushil  
K. S. Rzhevkin  
V. P. Sigorskii  
A. P. Skibarko  
I. P. Stepanenko  
V. P. Taranenko  
V. T. Frolikin  
V. I. Chaikovskii  
Yu. Ya. Yurov

	Russian page	English page
Some Features of Multifrequency Frequency-Shift Keying Communications Systems. M. P. Dolukhanov.....	163	109
Transformation of Transverse Waves in an Electron Beam by an Electrostatic Lens. Yu. Ya. Yurov.....	169	113
Generalization of a Method of Harmonic Synthesis and its Applications in Radio Engineering. V. G. Osipenko.....	177	119
Optimum Selection of Certain Parameters in a Converter for a High-Sensitivity DC Amplifier. N. M. Malyarevskii .....	188	127
Methods and Accuracy of Determining Phase Differences from Lissajous Figures. V. S. Panchenko .....	198	134
The Selection of Different Component Designs. S. V. Moiseev and V. A. Pokrovskii .....	207	142
Pulse-Repetition-Frequency Dividers Using a Square-Wave Time-Marking Voltage. V. N. Yakovlev and F. N. Butrimenko .....	214	147
Analysis of Transients in Traveling-Wave Amplifiers Using Sections of Long Lines. G. F. Yukhtanov.....	224	154
The Development of Breakdown in High-Voltage Modulator Tubes Under Static Operating Conditions. P. V. Poshekhonov and B. A. Samyshkin .....	232	160
Brief Communications		
The Q of a Nonlinear Circuit with a Magnetized Ferrite Core. A. A. Tudorovskii and N. G. Kharatishvili .....	239	165
Use of Semiconductor Diodes to Modulate Microwave Signals in the 10-Centimeter Band. V. T. Tsarenko and L. E. Malyshenko .....	241	167
Nonlinear Errors in Measuring the Correlation Function for the Case When the Frequency Ranges of the Voltages are Different. V. I. Vinokurov .....	243	169

(Continued)

Single Issue: \$35

Annual Subscription: \$115

© 1966 by The Faraday Press, Inc.

All rights reserved. This publication or parts thereof may not be reproduced in any form without permission of the publisher.

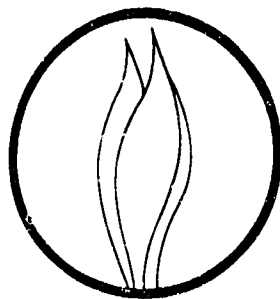
## The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N. Y. 10011

## CONTENTS (CONT'D)

	Russian page	English page
An Electronic Switch with a Cathode-Ray Tube Indicator. V. M. Mironov, V. V. Pilinskii, and O. A. Yaneshevskii .....	245	170
A Phase Restoring Method of Generalized Amplitude Detection. V. N. Nogin .....	248	172
An Energy Amplitude Detector. S. S. Zel'manov .....	250	174
A Selective RC Amplifier. M. F. Ponomarev .....	252	176
Noise Immunity of One Method of Phase Discrimination. K. V. Pavlenko .....	256	179
Study of Phase and Amplitude Build-up of FM Signals in Selective Systems. V. V. Molebnyi .....	261	184
Reliability of Standby Systems with Automatic Standby Switching. L. L. Barvinakii and V. S. Dem'yanchuk .....	266	188

Available From Faraday Press



# Soviet Radio Engineering

The Faraday Press cover-to-cover  
translation of *Izvestiya VUZ. Radiotekhnika*

Content

Volume 10 • Number 3 • May-June 1966

Editorial Board  
*Izvestiya VUZ. Radiotekhnika*  
a publication of the  
Higher Educational Institutes USSR

V. V. Ogievskii,  
Editor-in-Chief  
Ya. K. Trokhimenko,  
Associate Editor

Yu. T. Velichko  
N. F. Volierner  
L. N. Kolesov  
I. V. Lebedev  
Yu. S. Lezin  
E. I. Manaev  
M. S. Neiman  
A. V. Netusil  
K. S. Rzhavkin  
V. P. Sigorskii  
A. P. Skibarko  
I. P. Stepanenko  
V. P. Taranenko  
V. T. Froikin  
V. I. Chaikovskii  
Yu. Ya. Yurov

	Russian page	English page
A Communication System With a Many-Valued Modulation Characteristic. D. V. Ageev and B. D. Zabegalov.....	287	191
Quasi-Harmonic Synchronization of the Oscillations of a Self-Oscillator. T. I. Bardila and B. A. Mandzii.....	292	195
Influence of Section Angle Errors on the Gain of a Parabolic Antenna with Automatic Phasing. A. L. Aizenberg.....	300	201
Estimate of Echo Signal Amplitude with Account for the A Priori Probability Density Distribution of its Level. N. F. Vollerner, V. G. Balitskaya, and V. V. Dugin....	310	208
Theory of M-Type Beam Devices of Cylindrical Design, Taking Space Charge into Account. V. I. Gaiduk and M. B. Tseitlin .....	316	213
Effect of Initial Saturation in Alloy Transistors at High Injection Levels. Yu. D. Chaika and S. Ya. Shats.....	327	221
Brief Communications		
Problem of Determining the Wavelength in a Waveguide with a Dielectric. G. F. Semenov .....	334	227
Selective Transistor Logarithmic Amplifiers. V. M. Volkov and V. K. Stepanenko .....	337	230
Statistical Characteristics of a Sampling Detector with Non- optimum Logic. Yu. P. Grishin and V. I. Shlomin.....	340	232
Generalized Method for Constructing Canonical Systems of Passive Two-Element Two-Terminal Networks. Ya. K. Trokhimenko .....	344	235
A High-Power Pulse Generator. I. S. Sidorenko .....	349	240
Amplification of FM Signals with a Locked Oscillator Using a Tunnel Diode. V. F. Skupoi .....	352	242
Estimating the Accuracy of Pulsed Surveillance Radar with Discrete Signal Processing. V. V. Avdeev .....	354	244
Certain Production Criteria for Large Scale Monolithic Antenna Radomes. E. A. Vorob'ev .....	359	248

(Continued)

Single Issue: \$35

Annual Subscription: \$115

© 1966 by The Faraday Press, Inc.

All rights reserved. This publication or parts thereof may not  
be reproduced in any form without permission of the publisher.

## The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N. Y. 10011



**CONTENTS (CONT'D)**

	Russia, page	English page
Simulating the Operation of Coherent Radar Stations with the Aid of Ultrasonics. M. N. Novoksharov .....	362	250
The Displacement of the Center of a Video Pulse Packet at the Output of an Idealized Pulse Circuit with Delayed Positive Feedback. M. A. Sokolov .....	365	253
Design of Broadband Transformers for Ultrasonic Frequencies. Yu. S. Rusin .....	369	257
Experimental Investigation of the Logarithmic Method of Generalized Amplitude Detection. V. N. Nogin .....	371	259
The Role of the Electric Field in the Switching-on Process of a Thyristor. L. N. Kaptsov, V. A. Kurochkin, and N. N. Trofimchuk .....	374	262
Improved Economy Criteria for Single Sideband Transmitters. A. I. Khasabov .....	377	265
Amplifiers with Complex Correction in the Cathode. V. E. Katyukhin and V. M. Kirpichnikov .....	381	268
Automatic Gain Control in Transistor Oscillators. Yu. D. Krisilov and Yu. K. Filipskii ....	382	270
Electronic Conductance of a Klystron Second Resonator Gap for Large Bunching Parameters. G. P. Petin and A. Ya. El'bert .....	387	274
Radio Transformer Winding Insulation Testing. M. M. Nekrasov, V. V. Zaika, and B. Ya. Yazytskii .....	389	277
Potentialities of Periodic Comparison Measuring Instruments. P. P. Ornatskii and Yu. A. Skripnik .....	393	280
Dissertation Abstracts		
Effect of Temperature and Adsorbed Moisture in a Particular Case of Microwave Measurement. S. I. Golota .....	398	284
Accuracy of One Method of Measuring Phase Difference. V. S. Panchenko .....	399	284
Analysis of Linear Television Systems by the Mean Square Error Criterion. N. K. Milenin ...	400	285

**Available From Faraday Press**

# SPACE BIOLOGY AND MEDICINE

Vol. 1, No. 5, 1967

- USSR -

Following is a complete translation of the Russian-language periodical Kosmicheskaya Biologiya i Meditsina (English version above), Vol 1, No 5, Moscow, 1967, Meditsina Publishing House, pages 1-96. Author's name and original source page accompany each article.

## CONTENTS

	<u>Page</u>	
	Source	Report
Course of Development of Soviet Space Biology and Medicine (V. V. Parin, et al.) .....	5	1
Results and Future of Research in the Field of Space Genetics (O. G. Gazenko, et al.) ...	12	10
Structural and Functional Impairments of Certain Systems of the Animal Body in Response to Extreme Exposures (V. V. Parin, et al.) .....	17	18
Mathematical Modeling of Heat and Humidity Variation in Airtight Spaceship Compartments (B. A. Adamovich, et al.) .....	25	30
Effect of a Diet Containing Unicellular Algae on the Composition of Enteric Microflora in Animals (V. M. Shilov, et al.) .....	31	40

(Contd)

Available From JPRS 44299

CONTENTS (Cont'd)

	<u>Page</u>	
	Source	Report
Effect of Transverse Accelerations on the Acetylcholine Content and Cholinesterase Activity of the Blood of Experimental Animals (N. V. Korneyeva, et al.) .....	34	46
Correlation of Electroencephalograph (EEG) Shifts and the Food-Procuring Reflex of Rabbits during Increasing Hypoxia (L. V. Kalyuzhnyy, et al.) .....	38	53
Experience in Use of Prophylactic and Therapeutic Complexes During Repeated Exposure to Ionizing Radiation (M. N. Trushina) .....	46	67
Some Interpretations of the Biological Effect of Chronic $\gamma$ -Irradiation (A. F. Khoruzhenko, et al.) .....	52	77
The Combined Effect of Two-Month Hypokinesia and Radial Accelerations on the Cardiovascular System (G. P. Mikhaylovskiy, et al.) .....	57	86
Functional Changes in the Nervous System and Functioning and Certain Analyzers in Response to the Combined Effect of Hypokinesia and Radial Acceleration (T. N. Krupina, et al.) .....	61	91
Human Basal Metabolism During Prolonged Bedrest (B. S. Katkovskiy) .....	67	100
Results of Physiological Studies Performed in a Slow Rotation Chamber (R. R. Galle, et al.) .....	72	108
On the Interaction of Analyzers During Weightlessness (L. A. Kitayev-Sayk) .....	79	119
Characteristics of Reaction of the Human Acoustic Analyzer to Some Space Flight Factors (Yu. V. Krylov) .....	84	126
		(Contd)

Available From JPRS 44299

CONTENTS (Cont'd)

	<u>Page</u>	
	Source	Report
<u>Problemy Kosmicheskoy Biologii</u> (Problems in Space Biology), Volume V (I. T. Akulinichev, et al.) .....	90	134
Biological Rhythms and Development of Work and Rest Regimes for Cosmonauts (F. P. Kosmolinskaya) .....	91	136
Annual Meeting of the All-Union Botanical Society (L. V. Dmitriyeva) .....	94	142
Other Notes .....	94	142

Available From JPRS 44299

# Soviet Physics CRYSTALLOGRAPHY

A Translation of "Kristallografiya"

(Russian Original Vol. 12, No. 4, pp. 555-744, July-August, 1967)

Vol. 12, No. 4, pp. 489-660

January-February, 1968

## CONTENTS

		RUSS. PAGE	PAGE
Diffraction by a Linear System of Particles with an Arbitrary Form Factor. . . . .	(T)	489	555
D. Ya. Tsvankin . . . . .			
Debye Temperatures of Tetragonal and Trigonal Crystals. T. G. Bystrova . . . . .	(T/E)	493	560
and F. I. Fedorov . . . . .			
Orientalional and Habit Relationships between Crystalline Phases in Solid . . . . .	(T)	499	567
State Transformations. A. L. Roitburd . . . . .			
Growth Theory of Crystals Having a Diamond Lattice from the Gaseous Phase . . . . .			
by Formation of Two-Dimensional Nuclei. L. A. Borovinskii . . . . .	(T)	505	575
and R. P. Vorontsova . . . . .			
A Criterion for the Applicability of the Born Approximation to . . . . .			
Electron-Diffraction Structural Studies. V. F. Dvoryankin, . . . . .	(T)	509	579
A. Yu. Mityagin, and S. A. Akhundov . . . . .			
Determination of the Coherent Intensity and Background Intensity from the . . . . .	(T/E)	513	584
Observed Electron-Scattering Curve. I. D. Nabitovich, Ya. I. Stetsiv, . . . . .			
and Ya. V. Voloshchuk . . . . .			
X-Ray Study of the Sodium-Iron Metagermanate $\text{NaFeGe}_3\text{O}_4$ . L. P. Solov'eva . . . . .	(E)	517	591
and V. V. Bakakin . . . . .			
X-Ray-Diffraction Determination of the Oxygen Parameter of Ferrites . . . . .			
with the Spinel Structure from the "Forbidden" Reflections (442) and . . . . .	(E)	521	595
(644). D. M. Mazo . . . . .			
$\text{W}_6\text{Fe}_7$ -Type Compounds in the Nb-Fe, Ta-Fe, and Ta-Co Systems. . . . .	(E)	525	600
P. I. Kripyakevich, E. I. Gladyshevskii, and R. V. Skolozdra . . . . .			
The Spontaneous Electrooptical Effect in Tetragonal $\text{BaTiO}_3$ . I. S. Zheludev, . . . . .	(E)	528	604
E. V. Sidnenko, and S. I. Teplyakova . . . . .			
Ferroelectric Response of Tetramethylammonium Trilodomercurate. . . . .			
V. A. Gerken, V. I. Pakhomov, A. S. Sonin, E. I. Marchenko, . . . . .	(E)	531	607
and V. N. Nepomnyashchaya . . . . .			
Dielectric Properties of $\text{SrTiO}_3$ Crystals, Pure and Doped with Iron and . . . . .	(E)	534	612
Chromium. B. N. Matsenashvili . . . . .			
Polymorphous Single Crystal-Single Crystal Transition in Silver Nitrate. . . . .	(E)	537	616
Yu. G. Asadov . . . . .			
Calculating Extinction Effects. A. V. Kuznetsov and O. N. Kozlov . . . . .	(T)	540	620

(Contd)

Copyright © 1968 by the American Institute of Physics

Available From American Institute of Physics  
Vol 12, No 4, Jan-Feb 1968

CONTENTS (continued)

		RUSS. PAGE	PAGE
Extinction Effects in Aluminum Single Crystals. <u>O. M. Kozlov</u> and <u>A. V. Kuznetsov</u> . . . . .	(E)	544	626
Regarding the Determination of Black Stain from Extinction Effects, <u>G. M. Vorob'ev</u> and <u>L. I. Kotova</u> . . . . .	(E)	546	631
Structure of Al - Cu - Mg Alloy in the Initial Stages of Aging. <u>T. V. Shechegoleva</u> and <u>N. N. Bulnov</u> . . . . .	(E)	552	635
Electron-Diffraction Study of Surface Diffusion in the Copper-Nickel and Copper-Silver Systems. <u>B. Ya. Pines</u> , <u>I. P. Grebennik</u> , and <u>I. V. Gekht</u> . . . . .	(E)	556	639
Characteristics of the Additive Coloring of Alkali Halide Phosphors Activated by Silver Halides. <u>L. M. Shamovskii</u> and <u>L. M. Rodionova</u> . . . . .	(E)	562	646
Crystal Structure and Electrical Properties of Indium Antimonide Films Deposited by the Three-Temperature Method. <u>K. V. Shalimova</u> , <u>A. M. Gulyaev</u> , and <u>S. A. Inozemtsev</u> . . . . .	(E)	569	653
Application of the Selective Etch Method in the Study of Structural Defects in Synthetic Quartz. <u>M. S. Joshi</u> and <u>A. S. Vag</u> . . . . .	(E)	573	656
Growth Figures and Dislocations in Rock-Salt Single-Crystal Layers. <u>V. M. Kosevich</u> , <u>V. M. Moskalev</u> , and <u>L. S. Palatnik</u> . . . . .	(E)	581	667
Determination of the Interfacial Energy at the Boundary between the Solid and Liquid-Crystal Phases of Para-Azoxyanisole and Cholesteryl Caprylate. <u>F. K. Gorski</u> and <u>N. M. Sakovich</u> . . . . .	(E/T)	586	674
Some Anomalies in the Face Growth Rates of $\text{NaClO}_3$ and $\text{KClO}_3$ as Functions of Temperature at Constant Supersaturation. <u>V. V. Sipyagin</u> . . . . .	(E)	590	678
Growth of Strip and Whisker Crystals of Cadmium Sulfide. <u>L. S. Palatnik</u> , <u>M. N. Naboka</u> , and <u>N. T. Gladkikh</u> . . . . .	(E)	594	684
Heteroepitaxy of Molybdenum on Tungsten from the Liquid State. <u>Yu. D. Chistyakov</u> , <u>A. I. Pekarev</u> , and <u>M. V. Gartman</u> . . . . .	(E)	597	688
Epitaxy of Cadmium Selenide on $\text{CaF}_2$ . <u>L. V. Al'tman</u> , <u>E. N. Vorontsova</u> , <u>Yu. V. Ruban</u> , and <u>G. P. Tikhomirov</u> . . . . .	(E)	601	694
Crystallization Mechanism of Selenium. <u>K. P. Mamedov</u> and <u>Z. D. Nurieva</u> . . . . .	(E/T)	605	699
Kinetics of Hydrothermal Crystallization of Corundum. II. Effect of Solvents on Crystallization. <u>V. A. Kuznetsov</u> . . . . .	(E)	609	702
BRIEF COMMUNICATIONS			
Interrelation between the Electrical, Magnetic, and Mechanical Properties of Crystals. <u>V. N. Lyubimov</u> . . . . .	(T)	612	708
A Program for Obtaining a Set of Integrated Intensities with a Nonautomatic X-Ray Diffractometer. <u>E. L. Lube</u> , <u>L. A. Butman</u> , and <u>D. M. Khelker</u> . . . . .	(T)	614	710
New Compounds of the $\text{MgZn}_2$ Type in Systems of Rare-Earth Metals with Rhenium. <u>E. E. Cherkashin</u> , <u>M. Yu. Teslyuk</u> , and <u>D. P. Frankevich</u> . . . . .	(E)	617	712
Synthesis and X-Ray Examination of Single Crystals of $\text{NaMF}_2$ Type. <u>A. G. Tutov</u> and <u>P. P. Syrnikov</u> . . . . .	(E)	619	713
The Quadratic Electrooptic Effect in Single Crystals of Ammonium Dihydrogen Phosphate. <u>V. E. Perfilova</u> . . . . .	(E)	621	715
Measurement of Some Electrostriction Coefficients for Ammonium Dihydrogen Phosphate. <u>M. P. Zaitseva</u> and <u>A. A. Potchenkov</u> . . . . .	(E)	623	716
A Method for Finding the Curie Temperature and Measuring the Temperature Dependence of the Dielectric Susceptibility of Ferroelectrics and Antiferroelectrics with High Electrical Conductivity. <u>I. G. Ismailzade</u> and <u>V. I. Nesterenko</u> . . . . .	(E)	625	717
Phase Transformation in the High-Resistance Semiconductor $\text{Sb}_2\text{S}_3$ . <u>A. P. Grigas</u> and <u>A. S. Karpus</u> . . . . .	(E)	627	719

(Contd)

Available From American Institute of Physics  
Vol 12, No 4, Jan-Feb 1968

CONTENTS (continued)

		RUSS. PAGE	PAGE
Estimate of Resolving Power and Choice of Optimum Exposure Conditions in the Determination of the Substructure Characteristics of Polycrystals from the Widths of Their X-Ray Reflections. <u>D. N. Shvrlin.</u> .	(T)	629	721
Method for the Quantitative Evaluation of the Macroscopic Block Structure (Nonsingle-Crystallinity) of Corundum. <u>I. A. Bass and S. D. Krasnenkova.</u> .	(E)	631	723
Studies of the Subgrain Structure of Curved Aluminum Crystal Analyzers of X-Ray Spectrographs. <u>I. B. Staryi and A. A. Khanonkin.</u> . . . . .	(E)	633	724
Mechanical Properties of Irradiated Sodium Fluoride Single Crystals Containing a Uranium Impurity. <u>A. A. Alybakov and Y. Shamyrkanov.</u> . .	(E)	635	726
Point Pit Etching in Quartz. <u>E. V. Tsinzerling.</u> . . . . .	(E)	637	727
Structure of Germanium Thin Films. <u>A. I. Bublik.</u> . . . . .	(E)	640	730
Optical Properties of Silver Iodide Films. <u>R. N. Kurdyumova and D. T. Sviridov.</u> . . . . .	(E)	643	733
Dependence of the Electron Mobility in Indium Arsenide Films on the Crystallite Orientation. <u>V. A. Vlasov and S. A. Semiletov.</u> . . . . .	(E)	645	734
Epitaxy of Ice on Sodium Bromate Crystals. <u>T. G. Petrov and A. P. Kasatkin.</u>	(E)	647	735
Production of Single Crystal Plates of Indium Antimonide by Crystallization of Droplets of the Melt in the Gap between Quartz Plates. <u>N. M. Demenkov and V. N. Maslov.</u> . . . . .	(E)	650	737
Substructure of Single Crystals of a Cobalt-Iron Alloy. <u>V. P. Ovcharov, N. N. Geveling, and V. P. Makarov.</u> . . . . .	(E)	652	738
Light Modulations in a Circularly Polarizing Modulating Field. <u>V. I. Zhurikov.</u>	(T)	655	741
CHRONICLES			
First All-Union Conference on Internal Friction in Nonmetallic Inorganic Materials. <u>N. A. Tyapunina, M. P. Shaskol'skaya, and L. A. Shuvalov.</u> . .	(R)	667	743

Available From American Institute of Physics  
Vol 12, No 4, Jan-Feb 1968

TABLE OF CONTENTS

	Page
<i>B. Gušić:</i>	
The Biological Base of the Human Statoacoustic Apparatus . . .	1
<i>M. Prejac and A. Safar:</i>	
Proteins in the Urine of Healthy People . . . . .	7
<i>I. Jeličić: Dj. Montani and I. Prpić:</i>	
Acrocephalosyndactyly — Apert's Syndrome . . . . .	14
<i>P. Bagović, A. Bunarević, J. Zadjelović and I. Puharić:</i>	
Actinomycosis of the Female Genital Organs . . . . .	25
<i>J. Lavčević, M. Hlača, V. Rudež and A. Bunarević:</i>	
Isolated Renal Actinomycosis . . . . .	34
<i>A. M. Mikloušić, T. Dürriegl and S. Cerlek:</i>	
Arthritis in the Course of Ulcerative Colitis . . . . .	42
<i>M. Pasini, J. Bradić and B. Purić:</i>	
Staphylococcal Empyema and Pyopneumothorax in Childhood .	47
<i>Z. Perko and I. Simonović:</i>	
Determination of Plasma Anorganic Iodine . . . . .	51
<i>M. Galinović-Weisglass:</i>	
Old and New About Actinomycosis . . . . .	59

Available From CFSTI TT 67-58020-2



**TABLE OF CONTENTS**

	Page
<i>M. Bačić, P. Bagović and I. Vodopija:</i>	
Controlled Systematic Examinations of Women to Prevent Cervical Cancer . . . . .	1
<i>I. Haasz and A. Haasz:</i>	
Acropathia ulcero-mutilans (Morbus Thevenard) . . . . .	7
<i>A. Kröpfl, M. Prejac, Z. Rukavina and A. Bunarević:</i>	
Perforation of a Luetic Aneurysm of Aorta into the Superior Vena Cava . . . . .	16
<i>J. Matušan and J. Romac:</i>	
Attempted Suicide with Etiol, an Organophosphorous Pesticide . .	23
<i>N. Giunio:</i>	
Tuberculosis Therapy . . . . .	29
<i>M. Jung, D. Blatnik and B. Snoj:</i>	
Preparation of a New Freeze-Dried Nutrient Medium for Cultures of Human Peripheral Blood Leukocytes . . . . .	36
<i>Z. Kulčar and A. Zimolo:</i>	
The Importance of Controlled Systematic Examinations in Women's Health Protection . . . . .	42
<i>S. Boschi:</i>	
Contribution to the Retrospect "Advance in Urologic Diagnostics" .	47

**Available From CFSTI TT 67-58020-3**

**LIJEČNICKI VJESNIK**  
**Vol 89, No 4, 1967**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>D. Kamčevski:</b>	
Postwar Catastrophes in Macedonia and Experiences in Organizing Health Services . . . . .	1
<b>M. Pasini, V. Luetić, I. Janjić and E. Peruško:</b>	
Pacing of the Hearth with Artificial Electrical Stimulators . . . . .	15
<b>F. Stančić-Rokotov, P. Surdonja and I. Jeličić:</b>	
Thoracic Disc Herniation as a Rare Cause of Spinal Cord Compression . . . . .	22
<b>S. Marin:</b>	
Primary Tuberculosis in Adults . . . . .	28
<b>N. Mihajlović:</b>	
Rectal Cholecystography with Biloptyn Solution . . . . .	36
<b>A. Nick:</b>	
The Health Service in Extraordinary Situations . . . . .	42
<b>B. Popović:</b>	
Partners in Health Protection . . . . .	47

**Available From CFSTI TT 67-58020-4**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>O. Jelić and A. Jelić:</b>	
Immune Serum Globulin (Gamma Globulin) in Prevention of Infectious Hepatitis . . . . .	1
<b>M. Rupec and H. Behrend:</b>	
Significance and Specificity of Kveim's Reaction . . . . .	5
<b>V. Bauk:</b>	
Speech Rehabilitation of Patients with Cleft Palates . . . . .	13
<b>K. Dogan, S. Dogan and M. Lovrenčić:</b>	
Agnesis of the Corpus Callosum in Two Brothers . . . . .	16
<b>B. Andrejević, V. Nikolić and Z. Jakovljević:</b>	
A Case of Morsus Viperæ Ammodytes . . . . .	26
<b>A. Marić:</b>	
"Bayer" Depot-Impletol as an Adjuvant Drug in Physical Therapy and Rehabilitation . . . . .	30
<b>Z. Košutić:</b>	
The Control of Viral Hepatitis . . . . .	35
<b>Z. Ašperger:</b>	
Human Life in the Cardiologist's Hands . . . . .	40

**Available From CFSTI TT 67-58020-5**

# METHODS OF INVESTIGATION

	Page
A.P. Makhinya. The Photoelectrocolorimetric Determination of Low Concentrations of p-Nitrophenol in Water . . . . .	376
A.I. Kopanov and A.V. Samtsov. A Test with Bengal Rose Tagged with I <sup>131</sup> . . . . .	379
R.B. Tupeeva. The Determination of Thioglycolic Acid in Air . . . . .	381
G.S. Salyamon. The Determination of Polyethylenepolyamines and Primary Alkylamines in Air . . . . .	384
O.D. Nelkov, A.G. Alekseev and V.I. Koval'. The Dispersion Analysis of Floating Dust . . . . .	390
N.P. Karashov. A Technique and Device for the Rapid Determination of the Short-Lived Fission Products of Radon in Air . . . . .	391
Yu.V. Novikov and M.V. Malysheva. The Use of the Method of Fluorescing Leucocytes in Hygienic Investigations . . . . .	396

## PUBLIC HEALTH ADMINISTRATION AND STATISTICS. TRAINING OF PUBLIC HEALTH PERSONNEL

D.N. Kalyuzhnyi and M.V. Kryzhanovskaya. Studies on Allergy . . . . .	399
R.B. Dzhabadov. The Part Played by the Public Health Services of the Azerbaidzhan SSR with Regard to the Resolutions of the 23rd Congress of the CPSU . . . . .	401

## ABROAD

F. Janda. Studies of School Hygiene in Czechoslovakia . . . . .	406
N.F. Izmerov. Some Comments on the 1965-66 Issues of the "Journal of the Air Pollution Control Association" . . . . .	409
Corrigenda . . . . .	415

( CONTD )

Available from JPRS 44153

DISCUSSIONS AND READERS' COMMENTS

	Page
A.P. Pronin. The Application of the Concept of Noise Exposure to Standards for Intermittent Noise . . . . .	416

FIELD REPORTS

N.N. Petrova. The Spectrographic Determination of Low Beryllium Concentrations in Water and Biological Substrates . . . . .	420
I.T. Zimnitsina. A Case of Food Poisoning Caused by Pathogenic E. coli Sero-Type, O145 . . . . .	423

COMMUNICATIONS IN BRIEF

L.I. Los'. Protective Zones for the Control of Atmospheric Pollution by Discharges from Chemical Works . . . . .	426
P.G. Tkachev, N.R. Kosiborod, T.I. Nevolina, T.K. Shipitsina, and M.F. Kirpicheva. The Effect of Discharges from the Production of Aliphatic Amines as Shown in Blood and Urine Tests in Children . . . . .	428
A.N. Braslavskii and Z.I. Znamenskaya. The Hygienic Properties of Leather Substitutes Consisting of Leather Splints Applied to a Textile Base . . . . .	433
A.P. Okhrimenko, L.F. Borisovets, and V.G. Tsapko. A Hygienic Assessment of Working Conditions of Persons Engaged in the Use of Agricultural Fertilizers . . . . .	436
Yu.M. Gubachev. Vitamin C Metabolism in the Inhabitants of the Polar Regions . . . . .	439
M.T. Dmitriev and O.I. Yurasova. Content of the Products of the Radiolysis of Air in the Working Chambers of a Powerful Gamma Unit . . . . .	442

(Contd)

Available from JPRS 44153

CONGRESSES · MEETINGS · CONFERENCES · SCIENTIFIC SOCIETIES

	Page
I.I. Alekperov. Conference on Occupational Hygiene, Toxicology and Pathology in the Petroleum and Petrochemical Industry . . . . .	448
Yu.D. Gubernskii. Scientific Session Devoted to the Effect of Climate on Cardiovascular Pathology . . . . .	449
S.V. Miller. The Activities of the Sverdlovsk Branch of the All-Russian Society of Hygienists and Sanitary Physicians during 1965-66 . . . . .	451

BOOK REVIEWS

Z.G. Frenkel'. F.F. Erisman. — V.A. Bazanov . . . . .	454
E.Ts. Andreeva-Galanina. The Biological Effects of Ultrasound. — S.I. Gorshkov, O.N. Gorbunov, G.A. Antropov . . . . .	455
G.M. Makhkamov. The Physical Development of Urban and Rural Children and Young People in the USSR. — A.Ya. Gol'dfel'd, A.N. Markov, and A.G. Tseitlin . . . . .	458
Z.D. Gorkin and O.N. Savel'ev. Occupational Hygiene for Adolescent Workers. — I.A. Arnol'di . . . . .	459

CURRENT EVENTS AND INFORMATION . . . . .	461
LIST OF ABBREVIATIONS . . . . .	464

Available from JPRS 44153

## CONTENTS

### PHYSICS

J. Jastrzębski, M. Moszyński, A. Zgliński — Time-to Amplitude Converter for the Measurements of Nanosecond Isomers . . . . .	1
M. Moszyński — High-Amplification Photomultiplier Divider Supply . . . . .	21
J. Kuczera — Penetration of Monoenergetic Electrons Through Dielectrics . . . . .	32
A. Kobelak, B. Rozenfeld, E. Urbanowski, J. Wesolowski, A. Dąbek — Beta Radioactivity of the Annual Rings of Spruce Trees from the Lower Silesia Region . . . . .	40
J. Bara, M. Janicki — Automation of the Mössbauer Spectrometer . . . . .	45

### CHEMISTRY

J. Minczewski, H. Jaskólska — Extraction of Metals with Acetylacetone from Halogenic Acids and Nitric Acid Solutions . . . . .	49
S. Sterliński, R. Dybczyński — Determination of Caesium Traces in Mineral Salts by the Neutron Activation-Ion Exchange Chromatography Method . . . . .	59
S. Wajda, F. Pruchnik — Isotopic Exchange as a Criterion of the Structure of Octahedral $[\text{Mo}(\text{CNS})_6]^{3-}$ Complexes. II. Isotopic Exchange in the System $[\text{Mo}(\text{NCS})_6]^{3-}-\text{N}^{14}\text{CS}^-$ . . . . .	81
W. Dembiński, A. Deptuła, S. Rykowski — The Effect of Precipitation Conditions of Ammonium Polyuranate on Sinterability of Uranium Dioxide . . . . .	93

### LETTERS TO THE EDITOR

M. Taube — Remarks on the Classification System of Nuclear Reactors . . . . .	100
---	-----

### ENGINEERING AND APPARATUSES

P. Urbanski — Choice of Optimal Geometrical Conditions for X-Ray Fluorescence Coating Thickness Gauging . . . . .	102
B. Pomierny, K. Prokopowicz, T. Wałęcki, A. Szuchnik — A Laboratory Apparatus Assembly for Measurements of Carbon Weight Fraction in Hydrocarbons . . . . .	112
J. Kaniewski — A Solid-State Error Detector for Nuclear Reactor Automation . . . . .	117
J. Iwiński — Transistorized Low-Level Discriminators . . . . .	129

Available from AEC-tr-6653,6654

CONTENTS

(Numbers in parentheses are original Russian page numbers.

These Russian page numbers are also quoted at the head of each paper.)

A Generalized Calculation of the Oscillator Strengths of the Calcium Atom . . . . .	E. M. Anderson, V. A. Zilitis, and E. S. Sorokina	270 (513)
A Study of the Mechanism of Excitation and Ionization in the Plasma of an Argon Arc . . . . .	V. Ya. Alexandrov, D. B. Gurevich, and I. V. Podmoshenskii	282 (521)
An Investigation of the Dependence of the Electric and Spectral Properties of a Gas Discharge on the Frequency of the Exciting Field . . . . .	A. P. Motornenko	286 (528)
Some Problems in the Theory of the Vibrational Spectra of Polymers and Periodic Molecules of Finite Length. II. Intensities in the IR Spectra and the Influence of Terminal Groups . . . . .	L. A. Gribov and T. S. Abilova	290 (535)
Vibrational Spectra of Chlorosubstituted Hydrocarbons. III. Calculation of the Normal Vibrations of Some Chlorosubstituted Propanes . . . . .	R. G. Gasanov	294 (343)
Theoretical and Experimental Study of the Absolute Intensities and Depolarizations of the Raman Lines of Polyatomic Molecules. III. 1,1-C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub> , cis-C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub> , trans-C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub> , C <sub>2</sub> H <sub>3</sub> Cl, and CH <sub>2</sub> -CDCl <sub>3</sub> . . . . .	V. S. Kukina and L. M. Sverdlov	297 (550)
Characterization of Deformation Vibrations by Unit Vectors Nonperpendicular to Chemical Bonds . . . . .	A. M. Prima	299 (554)
Changes in the Intensity of X-H Stretching Vibrations During the Transition from Gas to CCl <sub>4</sub> Solutions . . . . .	E. V. Brown	301 (558)
Effect of Formation of the Intermolecular Hydrogen Bond on the Absorption Band Intensity of the C≡C Group in Infrared Spectra of Monosubstituted Acetylene Solutions . . . . .	E. A. Gastilovich, D. N. Shigorin, K. V. Zhukova, and O. G. Yarosh	304 (564)
Spectral Distribution of the Absorption of Infrared Radiation by Local Vibrations at Multiple and Combination Frequencies . . . . .	M. A. Krivoglaz and I. P. Pinkovich	307 (571)
Intensities in Raman Spectra of Crystalline Powders . . . . .	V. S. Ryazanov and M. M. Sushchinskii	312 (580)
Summary Properties of $\pi$ Electron Cloud of p-Dialkylbenzene Molecules in Crystals . . . . .	G. V. Klimusheva	314 (584)
Temperature Dependence of the Line-Width in the Quasiline Fluorescence Spectrum of 1,12-Benzoperylene . . . . .	R. I. Personov and V. V. Solodunov	317 (590)
Line Structure of the Luminescence Spectra of Uranyl Nitrates . . . . .	L. V. Volodko, A. I. Komyak, and L. E. Sleptsov	319 (593)
Excitation of the Uranyl Ion by Intramolecular Energy Transfer . . . . .	L. I. Kononenko, N. S. Poluektov, and L. M. Burtchenko	321 (598)
Spectrum of the Ca <sup>2+</sup> Ion in a CaWO <sub>4</sub> Single Crystal . . . . .	F. Z. Gilfanov, A. M. Leushin, and A. L. Stolov	323 (602)
Optical Spectra of Nd <sup>3+</sup> in Single Crystals of Scandium and Yttrium Oxides . . . . .	G. M. Zverev, G. Ya. Kolodnyi, and A. I. Smirnov	325 (606)
Effect of Bombardment on the Low-Temperature Luminescence Spectrum of CdS Crystals . . . . .	K. F. Lider and B. V. Novikov	328 (611)
On the Problem of Developing a Continuously Tunable Laser. II . . . . .	B. P. Kirsanov and A. S. Selivanenko	330 (615)
SHORT COMMUNICATIONS		
Optical Properties of Rhodium in the Infrared Spectral Region . . . . .	G. A. Bolotin and T. P. Chukina	333 (620)
Vibrational Frequency and Absorption Band Intensities of the C≡C Bond in Monosubstituted Acetylenes . . . . .	E. A. Gastilovich and D. N. Shigorin	334 (622)
On the Phase Relationships in the Locking Zone of the Ring Laser . . . . .	N. N. Rozanov, G. N. Vinokurov, and O. B. Danilov	336 (624)

(Contents continued on inside back cover)

(Contd)

Available from Optical Society of America



Measurement of the Electrooptical Parameters and Absolute Intensities of the Infrared Bands of Deuterio-substituted Monoperfluorines . . . . .	V. N. Yaradina and L. M. Sverdlov	337 (626)
Shift of the C≡N Band Due to the Interaction of Acetonitrile with Ammonium Salts in Solution . . . . .	G. S. Denisov, E. V. Ryltsev, and D. N. Suglobov	338 (628)
Determination of Certain Luminescent and Spectral Characteristics of Organic Phosphors in Binary Solvents . . . . .	A. V. Aristov and E. V. Viktorova	340 (630)
Refractive Indices of Liquid Propane at Bubble-Chamber Temperatures . . . . .	A. F. Gamalii, V. M. Gorbunkov, and M. I. Solovev	342 (633)
Effect of Aggregation State on Conjugation in Bipyridil Molecules . . . . .	A. V. Bobrov and V. P. Gupta	343 (634)
Correlation of Laser Photons . . . . .	V. V. Artemyev	345 (637)
Pulse Discharge in Zinc Vapor in the Presence of Xenon . . . . .	G. A. Volkova and V. K. Prokofyev	347 (640)
On Triplet-Triplet Energy Transfer from Benzene and Toluene to Diacetyl in the Liquid Phase . . . . .	I. A. Lisovskaya, M. D. Zakharova, and I. G. Kaplan	348 (641)
On the Mechanism of Energy Transfer from Aromatic Compounds to Rare Earth Ions . . . . .	V. F. Morina, V. L. Ermolaev, and Yu. K. Khudenskii	349 (643)
Some Remarks on the Operation Mechanism of the Neon-Oxygen Gas Laser . . . . .	I. V. Kolpakova and T. P. Redko	351 (646)
On Certain Characteristics of the Stimulated Emission of Neodymium Glass at 4.2°K . . . . .	M. N. Tolstol and V. N. Shapovalov	352 (648)
An Estimation of the Effective Cross Section for the Direct and Stepwise Ionization of the Cd Atom by Electron Impact . . . . .	N. P. Penkin and T. P. Redko	353 (650)
BOOK REVIEW		
N. Bloembergen, <u>Nonlinear Optics</u> . . . . .		355 (652)

Available from Optical Society of America

# CONTENTS

A. Anczykowska, K. Bernatowska-Knapczykowska, L. Zamorska: Camurati-Engelmann's disease in three siblings . . . . .	168
J. Hajtek: The diagnostic value of myelography in closed trauma of the brachial plexus . . . . .	175
W. Brosz, T. Kantowski, S. Koczorowski, A. Kuźrzycki, R. Koltowski B. Olejak: The role of angiocardigraphy in the choice of method of surgical treatment in cyanotic heart diseases . . . . .	183
O. Kapuściński, W. Pacocha: Radiologic diagnosis of Fallot's trilogy . . . . .	191
J. Kukolewska-Machnicka: Roentgen diagnosis of diseases of the mammary gland . . . . .	204
S. Kubicz: The role of craniocaudal and caudocranial vertical positions in radiologic examinations of the thoracic organs in children . . . . .	219
D. Jakubowska, S. Winnicki: Pulmonary hypoplasia in children . . . . .	230
J. Dobrowolski, K. Czyżewski: Two rare cases of coexistence of pulmonary hypoplasia and cystic degeneration . . . . .	237
H. Radelicka-Rajszys, A. Marciński: The normal radiologic picture of the terminal coil of the small intestine in children . . . . .	241
Z. Bem, I. Birecka: Coexistence of tumor of the gastrointestinal tract and Acanthosis nigricans . . . . .	248
L. Smajkiewicz: Abnormal drainage of the common bile duct into a duodenal diverticulum . . . . .	252
J. Wójtowicz, S. Zierhoffer, J. Stryczyński: Angiographic evaluation of the lesions of the renal parenchyma in the course of nephrolithiasis . . . . .	256
S. Jach, S. Remigolski: Trials of direct contrast shadowing of the portal vein . . . . .	266
J. Felczak, A. Bielecki, J. Meyer: A case of lipocalcinogranulomatosis . . . . .	279
L. Niechwiedowicz-Obada, T. Zakowa: Interstitial calcinosis . . . . .	282
C. Kwaśniewska-Rokicińska: Studies on blood levels of pyruvic acid in patients treated with radium and Roentgen rays . . . . .	286
W. Z. Kruk: Studies with the whole body counter in radiobiology, nuclear medicine and clinical medicine . . . . .	293
J. Malesa, H. Siwicki: Comparison of scintillation methods of measuring minimal activity of tritium water in biological studies . . . . .	297
Z. Baltrukiewicz: Exposure to X irradiation in diagnostic Roentgen laboratories on the basis of measurements of individual doses in 1964 . . . . .	301

Available From CMBN IT 67-56003/2

## РАДИОТЕХНИКА И ЭЛЕКТРОНИКА

## РАДИОТЕХНИКА I ЭЛЕКТРОНИКА

NUMBER 6

1967

## CONTENTS

	Page
S. A. Zhevakin and A. P. Naumov: Refraction of Millimeter and Submillimeter Radiowaves in the Lower Atmosphere .....	885
D. Ye. Vakman: Feasibility of Synthesis of Phase-Manipulated Signals .....	894
S. Yu. Vozbinas: Distortions and Noise Which Must be Contended with in Separating Two AM Signals with Overlapping Spectra .....	903
A. Ye. Basharinov and V. M. Polyakov: Equilibrium Radiation of a Flame in the Microwave Band .....	911
V. V. Hillil: A Homodyne Phasemeter for Measuring Electron Concentration in Plasma .....	915
Yu. P. Zabolotikov: The Reflection Factor for an $H_{10}$ -Wave Incident on an Asymmetrical Inductive Diaphragm in a Rectangular Waveguide with a System of Radiotransparent Films .....	921
D. I. Mirovitskiy and I. F. Budagyan: Synthesis of a Nonhomogeneous Dispersion Layer of a Line .....	929
V. S. Savell'ev: Interaction of a Radially Diverging Electron Stream and a Radially Travelling Electromagnetic Wave .....	941
I. S. Zhukova, S. P. Maminova and L. L. Odyets: Relaxation of Conductance in Si-SiO <sub>2</sub> -Au Diodes .....	948
N. P. Yesina, N. V. Zotova and D. N. Nasledov: Diffusion p-n-Junctions Made of p-InAs .....	952
V. Ye. Prozorovskiy and L. N. Kolesov: Screening in Film Circuits .....	957
G. V. Obrezkov: Operation of RC Storage Devices .....	961
M. A. Sokolov: Signal Extraction Program Minimizing Average Risk in a Multi-Node Communication System .....	968
V. N. Kurskiy: Probability of Decoding Error in Random Coding for a Binary Symmetrical Channel .....	977
L. N. Geyvandov, I. B. Levinson and P. Sh. Fridberg: The Elements of the Dispersion Matrix for a Two-Slot Waveguide Coupling .....	985
S. L. Baskakov and V. G. Kartashev: Simulating the Propagation of a Wave in a Hollow Waveguide .....	992
B. L. Al'tshuler, T. M. Golovner, M. B. Kagan and Ya. Y. Chernov: The Effect of the Region of Varying Structure on the Photoelectric Properties of Diffusion Heterojunctions in the GaAs-GaP Structure .....	999
BRIEF COMMUNICATIONS	
K. P. Kirdyashev: One-Dimensional and Two-Dimensional Filtering of Spatial Signals in Correlated Noise .....	1005
Ya. A. Fomin: Average Time of First Reaching the Boundaries of a Given Region by an Ergodic Random Process .....	1008
V. F. Komarovich: The Density of the Stream of Zeros, Extrema and Inflection Points in Stationary Process .....	1011
V. V. Lobysyn: Statistical Synthesis of a Linear Antenna, Assuming Phase Errors of Field Distribution .....	1013
A. G. Sheyn: Theory of a Cross-Shaped Diaphragmed Waveguide .....	1017
A. M. Andrusenko, V. V. Kobets, V. A. Slyusarskiy and V. Ye. Filippenko: Quasi-Optical Transmission Line Operating in the Submillimeter Range .....	1020

(Contd.)

Available from Institute of Electrical &amp; Electronics Eng.

	Page
L. P. Yatsuk and Yu. V. Shubakov: The Parameters of Nonresonant Waveguide Slot Radiators with Rotating Polarization .....	1024
Yu. N. Kazantsev: Hollow Dielectric Beamguides with Gas Filling .....	1027
Yu. N. Pchel'nikov: Interaction of an External Electron Beam with the Electromagnetic Field of a Helix .....	1029
A. S. Berlin, V. M. Davydov and N. V. Frolov: Effect of Microwave Losses on the Frequency Response of a Nonlinear Capacity Diode .....	1030
Yu. G. Baykov, N. Z. Shvarts and V. S. Etkin: Signal Limiting in Microwave Amplifiers Based on Tunnel Diodes .....	1034
V. I. Zharikov: The Problem of Laser Frequency Shift .....	1036
I. V. Grekhov, N. N. Kryukova, V. E. Chelnokov and V. M. Volle: Thyristors with a Controlled Avalanche Formation in the Forward and Reverse Directions ...	1039
Ye. A. Movchan and V. V. Shechelkanogov: Generation of Current Oscillation in Nonuniform Germanium .....	1041
I. I. Taubkin: Radiation Threshold of Photoelements with a Longitudinal Effect ...	1044
L. A. Serebrov and V. L. Shmulevich: Anomalous Features of Secondary Electron Emission Effects of Thin Films of Magnesium Fluoride .....	1048
A. M. Tyutikov: Sites Appearing in Beryllium Oxide Under Pressure, as Revealed by Emission Temperature Curves .....	1052
V. P. Kartashev and B. A. Utochkin: The Octupole Magnetic Lens in Correction of Distortions .....	1055
A. V. Kulakov and A. A. Rumyantsev: Propagation of Space-Charge Waves in an Electron Beam with a Potential Jump .....	1058
LETTERS TO THE EDITOR	
D. P. Luk'yanov: On the "Light Modulators with Cubic Crystals" .....	1060
A. L. Musatov, N. F. Popova, N. A. Soboleva and A. A. Yasnopol'skaya: Calendar ..	1061

#### EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

Available from Electrical & Electronic Eng.

## РАДИОТЕХНИКА И ЭЛЕКТРОНИКА

RADIOENGINEERING AND ELECTRONICS

No. 7, July 1967

NUMBER 7

1967

## CONTENTS

	Page
S.A. Zhevakin and A.P. Naumov: The Index of Refraction of Lower Atmosphere for Millimeter and Submillimeter Radiowaves. The Rotational Part of the Dielectric Permittivity of Atmospheric Water Vapor at Wavelengths Greater than 10 Micrometers .....	1067
V.V. Vitkevich and N.A. Lotova: Radiowave Scatter from Inhomogeneities of Interplanetary Plasma and Solar Supercorona, "Visible" to an Observer Located in the Solar System .....	1076
V.A. Bugayev: Sequential Detection of a Signal with Optimum Energy Distribution ..	1085
V.A. Likharyev and L.V. Dobrolyubov: Weighted Summation of Noncoherent Signal Trains .....	1091
A.G. Pavellyev: The Thermal Radio Emission of Bodies Bounded by Statistically Rough Surfaces .....	1096
B.Z. Katsenelenbaum and A.N. Sivov: Rigorous Formulation of the Problem of Free and Forced Oscillations of an Open Cavity .....	1101
V.A. Zyatitskiy: Average Conversion Losses in a Beam Waveguide (Infinite Non-Ideal Phase Correction Devices) .....	1108
I.V. Sukharevskiy and V.I. Zamyatin: Application of Orthogonal Expansions of Random Functions to Antenna Distortions .....	1117
V.L. Mironov and V.G. Myshkin: Diffraction of an Obliquely Incident Surface Wave by an Impedance Step .....	1126
V.G. Veselago, M.V. Glushkov and A.M. Prokhorov: Microwave Properties of Solid State Plasma .....	1134
I.V. Alyamovskiy: Tubular Electron Streams in Uniform Magnetic Fields at Arbitrary Cathode Screening .....	1140
V.I. Bogatkin and G.D. Lobov: Low-Frequency Noise in Gas Discharge Detectors ..	1149
A.M. Vasil'yev and S.I. Kirillova: Measurement of Lifetime of Excess Charge Carriers in Silicon Photocells .....	1156
Yu.A. Yevsayev, A.A. Lebedev and V.E. Chelnokov: Switching of Thyristors with an Injection Control Electrode Based on an n-p-n-p-n Structure .....	1161
A. Budinchevich: Emission Properties of High Melting Alloy Cathodes .....	1164
A.V. Druzhinin and T.A. Kupriyanova: Study of Emission of Binary Alloys by the Diffused Pair Method .....	1168
A.V. Druzhinin: Emission and Adsorption Properties of Some Binary Alloy Systems ...	1171
BRIEF COMMUNICATIONS	
A.A. Trukhachev: Two-Stage Detection with Statistically Dependent Stages .....	1176
A.N. Dmitriyenko and V.A. Korado: Detection Characteristics of a Train of Independently Fluctuating Pulses in Gaussian Noise of Unknown Intensity .....	1179
Yu.A. Chernov: The Spectral Density of a Random Sequence of Similar Perturbations ..	1181
A.D. Shatrov: The Theory of Strip Resonators .....	1184
N.Ya. Kotsarenko and A.M. Fedorchenko: Spatial Growth of Waves in a Plasma-Beam System .....	1187
Ye.I. Vasil'yev, V.I. Kanavets and V.M. Lopukhin: Nonlinear Interaction of an Electron Stream and Output Cavity Field .....	1191
A.I. Shyrov, I.P. Sokolov, T.P. Ryazanova and G.N. Aralina: Electrostatic Electron Gun with a Ring Cathode and a Perveance of $11 \times 10^{-6}$ A/V .....	1194

(Contd)

Available from Inst. of Elect. and Electronics Eng.

	Page
O.N. Sokolov: Properties of a One-Dimensional Accelerated Electron Stream . . . .	1198
R.A. Kazaryan, V.S. Arakelyan and S.P. Sidorova: Internal Modulation of the Light in a 0.63 Micrometer Laser. . . . .	1202
R.A. Kazaryan, L.V. Simonyan and E.S. Vartanyan: Microwave Light Modulator Using Two Coupled Cavities . . . . .	1204
L.N. Kurbatov, V.Ye. Maschenko, N.N. Mochalkin and A.D. Britov: Coherent Radiation in Coupled Cadmium Sulfide Excitons . . . . .	1207
V.V. Proklov, B.A. Stankovskiy and A.I. Morozov: Feasibility of Broad-Band Ultrasonic Delay Lines with Piezoelectric Semiconductor Converters . . . . .	1210
E.G. Melikyan: Electroacoustical Interaction in a Metal-Semiconductor Contact . . .	1212
V.P. Torchigin: Effect of Spurious Diode Parameters at the Limiting Frequency of Microwave Parametron Cycling . . . . .	1214
K.K. Likharev: Transients in a Tri-Stable Parametric Oscillator . . . . .	1217
Yu. L. Khotuntsev and O. F. Shakhno: Linearity of Phase Characteristics for Reflex Regenerative Amplifiers with a Maximally-Flat Frequency Response . . . . .	1220
T. Ya. Fishkova, M. Siladi and S. Ya. Yavor: Electrostatic Quadrupole Lens Made of Two Coaxial Slotted Cylinders . . . . .	1222
G.A. Zheludieva: Flight-Angle Distribution of Photoelectrons from an Antimony- Cesium Cathode . . . . .	1224
N.N. Sedov, G.V. Spivak and V.G. Dyukov: Determination of Microfield Distribu- tion from Electron-Optical Image Contrast . . . . .	1227
A.A. Zaytsev and N.A. Miskinova: Mobile and Immobile Striations in Ne and Ne-II <sub>2</sub>	1230
E.M. Savitskiy, V.F. Terekhova and E.V. Maslova: The Thermionic Emission of Yttrium, Scandium and Erbium . . . . .	1233
V.I. Gaman and V.D. Bazarov: Volt-Ampere Characteristics of Thin-Film Metal- Dielectric-Metal Structures . . . . .	1235
L.F. Afonina, A.I. Klimin, K.A. Mayskaya and G.B. Stuchinskiy: Secondary Emission Efficiency of Alkali Telluride Cathodes . . . . .	1237
S.V. Yermakov, E.A. Tishir and B.M. Tsarev: Effect of Substrate Temperature on the Work Function of Evaporated Films . . . . .	1239
V.V. Galitskiy: Symmetry of Multilayered Distributed R-C Structures . . . . .	1240
F.V. Lisovskiy and Ya. A. Monosov: Ferrite Magnetoelastic Microwave Power Modulator . . . . .	1243
S.G. Rudneva and V.I. Troyiskiy: Parasitic Lobes of Discretely-Scanned Antennas and their Suppression . . . . .	1245

EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic func-  
tions, Soviet mathematical symbols are the same as those encountered  
in the American literature. For the reader's convenience a list of such  
exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot(ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

Available from Inst. of Elect. and Electronics Eng.

Published by  
The Iron and Steel Institute  
4 Grosvenor Gardens London SW1  
by arrangement with the  
Department of Education and Science

STAL is published in Russian  
by Metallurgiya, Moscow

Subscription rates and general information  
on inside back cover

Extracts from this publication may be  
freely reproduced as long as the source is  
acknowledged

Editorial  
Marion E. Dodd, M.A.

Translators  
A. Echr L. Herdan  
C. M. Burnell Dr. S. Klemantaski  
B. Cotton C. I. Pedersen  
Major J. H. Dixon R. Sewell

## Ironmaking

- 185 Influence of moisture content and fineness of grinding of concentrate on quality of mixing and sinter strength D. G. Khokhlov and G. I. Komornikov
- 188 Experiments on heat treatment of sinter from Kursk magnetic anomaly ores A. N. Pokhnisnev et al.
- 191 Operation of blast furnaces with a thin-walled stack M. S. Kudoyarov et al.
- 194 Elevation of blast temperature by converting hot-blast stoves to staggered-parallel operation N. K. Leonidov and G. S. Klyagin (Discussion on Gruner's principle)
- 204 Construction of charging gear of large blast furnaces B. P. Krasheninnikov et al.

## Steelmaking

- 206 Slag formation when melting steel from a carbonaceous semi-product in 100 ton converters A. P. Potrasaev et al.
- 209 Alloying steel with tungsten in the ladle, using briquettes N. A. Chirkov
- 211 Multi-strand continuous casting of small square billets V. B. Gorskiy et al.
- 213 Effect of position of a curved mould in a continuous casting machine on billet quality P. G. Schmidt et al.
- 214 Refining cable steel in the ladle with a slag-forming mixture and injecting it with argon N. F. Dubrov et al.
- 216 Inoculating iron for ingot moulds with titanium Yu. A. Petrov and Yu. A. Lezov
- 217 Improving the design of steel ladles N. G. Zarubin et al.

## Electrometallurgy

- 219 Melting manganese-aluminium steel in an electric furnace under a lime-alumina slag V. I. Zhalyhin et al.
- 222 Effects of slag on thermal processes in electric furnaces V. E. Prirozhnikov

## Ferroalloys

- 224 Melting ferrosilicocalcium and using it for deoxidizing steel P. V. Topil'skii et al.
- 227 Building works to produce special steels and ferroalloys in Krasnoyarsk M. P. Kolyasnikov
- 227 Reducing carbon content of steelmaking silicomanganese by vibration treatment in the ladle V. S. Zel'din et al.

## Rolling production

- 228 Rails rolled from continuously cast slabs Yu. M. Chizhikov et al.
- 232 Manufacturing lightened I-beams E. Z. Freidenzon et al.
- 234 Cold rolling rectangular sections for piston rings from steel hard to deform I. K. Lazarev
- 237 Influence of geometry of diagonal roll pass on steadiness of strip in work I. A. Sharapov
- 238 Book review: Rolling lightened sections

## Tube production

- 240 Lubricants for hot broaching of round billets P. I. Chuiko et al.
- 242 Efficiency of ferrous metallurgy in relation to reconsideration of wholesale values of its output D. I. Popov and N. V. Samokhin

## Metal working and heat treatment

- 243 Industrial production of rolled sections of 40 steel with thermomechanical treatment V. V. Andreeva et al.
- 245 Effect of microalloying with rare metals on stability of thermomechanical hardening of steel D. A. Prokoshkin et al.
- 249 Hardening steels by electromechanical treatment B. M. Askinazi
- 251 Intensifying heat-treatment conditions for low-alloy mild steelplate D. S. Kazunovskii et al.
- 253 Some properties of stainless heat-resistant steel, and hot pressure treatment conditions for it S. Z. Yulovich et al.

## Economics and organization

- 255 Basic trends in reviewing wholesale prices of ferrous metals N. F. Skolok and V. I. Chepuranov

## Heat Technology

- 258 Automation of thermal conditions of regenerative soaking pits O. A. Bozomov et al.
- 260 Operation of metal recuperators at steelworks and engineering works E. S. Ramenskaya

## Power and plant

- 264 Control and treatment of water for converter gas coolers G. P. Sutotskii
- 268 Experience in operating waste-heat boilers used with open-hearth furnaces D. E. Kravtchen
- 270 Steam ejection pump for vacuum treatment of molten steel Yu. M. Kuznetsov and V. A. Uspenskii
- 271 Book review: Combustion of liquid fuel in industrial equipment

Available from British Iron & Steel Industry

TABLE OF CONTENTS

Petroll, J., V. Quitter, G. Schade, and L. Zimmermann. Testing Cyclone Separators .....	1
Leineweber, L. Design of Cyclones for Given Maximum Particle Size, Pressure Loss, and Flow Rate .....	11
Dubois, P.E. Wet Scrubber with Atomization of the Cleaning Liquid .....	18
Haase, D. The Influence of Wind on Suction .....	20
Vecsei, K. Determination of Gas Flow Rate by the Reference-Velocity Method .....	24
Pfefferkorn, G. The Photochemical Formation of Nonvolatile Droplets from Organic Vapors in Air .....	29
International Convention on Air Pollution, London 1966 .....	31
Air Pollution Control Exhibition, London 1966 .....	42
Industrial Reports .....	44
Patent Report .....	45

English summaries at the end of some articles  
are reproduced exactly from the original German text

Available from CFSTI TT 67-51408/3



Tsvetnye Metally Non-Ferrous Metals	Table of Contents August, 1966	Vol. 7, No. 8 English Translation
P. F. Lomako FOR FURTHER DEVELOPMENT OF NON FERROUS METALLURGY.....		1 (1)
IN THE MINISTRY OF NON FERROUS METALLURGY USSR AND THE CC OF TRADE UNIONS FOR WORKERS IN THE METALLURGICAL INDUSTRY.....		16 (15)
S. S. Telapnev ORE PEBBLE GRINDING AT THE ORDZHONIKIDZE PLANT OF THE "BALEIZOLO- TO" COMBINE.....		17 (16)
V. G. Rumyantsev, L. A. Reitarovskaya, R. S. Alpat'skaya, S. S. Shakhmatov, A. G. Efremov, N. Yu. Shakhmatova, and L. A. Dudina USE OF FLOTATION JIGGERS TO CON- CENTRATE RARE METAL ORES.....		21 (21)
A. A. Zolotko and Men Syan'-Kan USING FLOTATION JIGGERS FOR COAL CONCENTRATION....		25 (24)
I. N. Plaksin ON THE TECHNOLOGY AND TECHNIQUE OF EXTRACTING MINERAL PARTICLES WITH DIMENSIONS GREATER THAN FLOTATION SIZE AND LOWER THAN THE OPTIMUM GRAVI- TATIONAL SIZE.....		27 (26)
S. I. Chernykh FLOTATION OF MOLYBDENUM ORE WITH COUNTERFLOW.....		30 (29)
P. N. Alentov ONCE MORE ABOUT THE COPPER-ZINC PROBLEM OF THE URALS.....		32 (31)
V. I. Dornelko CALCULATION OF CURRENT EFFICIENCY IN ELECTROREFINING OF MUD-FORM- ING COMPONENTS OF COPPER, USING THE CURRENT-REVERSAL TECHNIQUE.....		37 (35)
G. N. Pakhamova and L. M. Marenkova SOME REACTIONS ON THE INSOLUBLE LEAD ANODE DURING THE ELECTRODEPOSITION OF ZINC.....		41 (38)
V. V. Kostelov FUMING TIN-CONTAINING RAW MATERIALS.....		44 (41)
A. I. Burov CALCULATING OPTIMUM CHARGE COMPOSITION IN LEAD CONCENTRATE SINTERING.		49 (46)
I. M. Vasserman, M. I. Evdokimova, A. S. Miloslavskii, A. I. Maramzin, A. D. Tols- toguzov, A. D. Travkina, G. M. Fishman, and E. A. Fonina CONTINUOUS AUTOMATION OF THE SYSTEM OF PRODUCING NICKELOUS HYDROXIDE FROM SOLUTIONS OBTAINED DURING THE HYDROMETALLURGICAL PRODUCTION OF COBALT.....		56 (51)
K. N. Savchenko, A. K. Stryazhkin, A. I. Savchenko, and L. K. Kukieva EFFECT OF THE INCREASE IN SEED RATIO ON ALUMINATE SOLUTION DECOMPOSITION.....		62 (56)
Yu. I. Dvinnin and V. A. Shcherbakov INDUSTRIAL TESTS ON THE ADDITION OF LITHIUM HYDROXIDE TO ELECTROLYTES OF ALUMINUM ELECTROLYZERS, CONTAINING SODIUM CHLORIDE AND MAGNESIUM FLUORIDE.....		65 (58)
M. F. Purits, V. M. Alekseev, and A. N. Zeiliger ECONOMIC ASPECTS OF POWER SUPPLY AND OPTIMUM LOCATION OF THE ALUMINUM INDUSTRY.....		69 (62)
V. A. Derovyan'kin, I. P. Kraus, and S. I. Kuznetsov RATE OF SODIUM HYDROALUMINO- SILICATE DISSOLUTION IN ALKALINE SOLUTIONS.....		73 (67)
V. V. Kurov, A. F. Mokhov, Z. V. Stolyarova, I. M. Rosenman, and E. F. Chalykh AUTOClave BAKING OF CARBON GRAPHITE MATERIALS.....		77 (70)
E. S. Pal'kevich, E. A. Arutyunov, and E. A. Lyukevich DETERMINING THE QUALITY OF TITANIUM SPONGE FROM ITS HARDNESS.....		80 (73)
IN THE MAIN COMMITTEE OF THE VDNKh USSR.....		84 (76)
M. E. Krasnikov, S. A. Kuchakovich, P. Ya. Tokmakov, K. A. Kuzakov, O. K. Shilin, Yu. P. Gritsenko, and G. I. Matveev PRODUCTION OF ROUND ROLLED SECTIONS FROM TITANIUM ALLOYS.....		85 (77)

(Continued)

(Contd)

Available From Primary Sources  
Vol 7, No. 8, Aug 1966

Table of Contents (Cont.)

V. I. Dobatkin and V. I. Elagin ON ALUMINUM ALLOYS WITH REFRACTORY ELEMENTS, OBTAINED BY GRANULATION.....	89 (81)
V. I. Kulakov, M. F. Bazhenov, and N. D. Tsabrov MECHANICAL AND CORROSION PROPERTIES OF ALLOY VD3 SHEETS.....	94 (86)
B. A. Kolachev, V. A. Livanov, P. D. Drosdov, and A. A. Bukhanova MECHANICAL PROPERTIES OF ALLOY MA2-1 WITH VARIOUS HYDROGEN CONTENTS.....	97 (88)
G. K. Kharchenko and V. G. Tkachenko CLADDING OF STEEL WITH TITANIUM USING A VANADIUM INTERLAYER.....	100 (90)
G. M. Vorob'ev and I. I. Maurits EFFECT OF REMELTING ALUMINUM ON ITS SODIUM CONTENT.....	103 (92)
A DISCUSSION OF BOOKS AT READERS' CONFERENCES.....	104 (93)
NEW BOOKS.....	107 (95)
A. Pen'ko SHAFT FURNACE SMELTING USING OXYGEN ENRICHED BLASTS AT THE EAST-HELENA PLANT (MONTANA, USA).....	108 (96)

NOTE: Numbers in parentheses represent page numbers in Russian original.

RUSSIAN ABBREVIATIONS IN TEXT

AN SSSR.....	Academy of Sciences, USSR.
CC CPSU.....	Central Committee, Communist Party, Soviet Union.
Gintsvetmet.....	State Institute of Non-Ferrous Metals.
Giprotsvetmet.....	State Institute for the Design and Planning of Non-Ferrous Metals Industry Establishments.
Giredmet.....	State Rare Metals Scientific Research Institute.
Gosplan.....	State Planning Committee of the Council of Ministers of the USSR.
GOST.....	All-Union Standard.
Mekhanobr.....	Scientific Research Institute for Mechanical Concentration of Minerals.
TsIIN TsM.....	Central Institute for Information on Non-Ferrous Metals.
UAZ.....	Ural Aluminum Plant.
UKSTsK.....	Ust'-Kamenogorsk Lead-Zinc Combine.
VAMI.....	All-Union Aluminum and Magnesium Industry.
VNIITsvetmet.....	All-Union Scientific Research Institute of Non-Ferrous Metallurgy.

Available from Primary Sources  
Vol 7, No. 8, August 1966

# VESTNIK OF THE USSR ACADEMY OF MEDICAL SCIENCES

No 11, November 1967

Following is a complete translation of the Russian-language periodical Vestnik Akademii Meditsinskikh Nauk SSSR (English version above), Vol 22, No 11, Moscow, November 1967, pages 1-103. Author's name and original source page accompany each article.

CONTENTS	Page	
	Source	Report
Opening address of N.N. Blokhin, President of the USSR Academy of Medical Sciences, at the 25th Anniversary Session of the General Meeting of the USSR Academy of Medical Sciences	5	1
Methodological and Methodical Principles of Theoretical Medicine (A.I. Strukov)	8	5
Advances in Physiology during the Period of Soviet Power and Prospects for its Future Development (P.K. Anokhin)	19	21
Fifty Years of Soviet Biochemistry (S.Ye. Severin)	30	36
Anatomy and Pathology (D.A. Zhdanov)	41	51
Fifty Years of Soviet Therapy (P.Ye. Lukomskiy)	50	64
Fifty Years of Soviet Surgery (A.A. Vishnevskiy)	60	78
Development and Advances in Soviet Pediatrics over a Fifty Year Period (Yu.F. Dombrovskaya)	69	89
	(Contd)	

Available from JPRS 43934

No. 11, Nov 1967.

	<u>Page</u>	
	Source	Report
A Half Century of Soviet Psychiatry and Neuropathology (A.V. Sneshnevskiy)	79	103
Development of Hygiene in the USSR over a Fifty Year Period (A.A. Letavet)	87	114
Advances in Public Health Science and Practice Dealing with the Control of Infectious Diseases in the USSR (P.G. Sergiyev)	96	126

Available from JPRS 43934

**Vestnik OF THE USSR ACADEMY OF SCIENCES**

**Vol 37, No 9, 1967**

[Following is a partial translation of the Russian-language journal Vestnik Akademii Nauk SSSR (English version above), Moscow, Vol 37, No 9, September 1967, pp 3-71, 78-106, 109-111 and 112-119. Original source page numbers accompany each article.]

**Table of Contents**

	<b><u>Page</u></b>
<b>IN THE PRESIDIUM OF THE ACADEMY OF SCIENCES USSR</b>	
The Principal Directions of the Scientific Activity of the Academy of Sciences Georgian SSR	1
Discussion of the Scientific Activity of the Mathematics Institute imeni V. A. Steklov	9
The Economic Reform and Scientific and Technical Progress	13
Scientific Activity of the Institute of Evolutionary Physiology and Biochemistry	21
<b>THE LIBRARY AND SCIENTIFIC INFORMATION</b>	<b>25</b>
A. I. Mikhaylov and R.S. Gilyarevskiy. Unsolved Problems of Scientific Libraries	28
A. I. Chernyy. From Foreign Experience in Improving the Activity of Scientific Libraries	37
<b>THE DEVELOPMENT OF SCIENCE IN THE EASTERN PART OF THE USSR</b>	
M. M. Odintsov. The Irkutsk Scientific Center	43
B. A. Neunylov and M. Ya. Yampol'skaya. In the Far Eastern Affiliate	48
T. A. Gimina, B. N. Zykin, S. L. Solov'yev, and I. K. Tuzov. Complex Investigations on Sakhalin	53
O. V. Makeyev and D. D. Lubanov. The Work of the Scientists of Buryatiya	60
On the 90th Birthday of Academician A. Ye. Arbuzov. M. M. Shemyakin and I. V. Torgov	64

(Contd)

Available from JPRS 43956

INTERNATIONAL SCIENTIFIC CONTACTS

N. S. Nametkin and V. V. Panov. The Seventh World Petroleum Congress	71
L. M. Biberman. A Soviet-French Colloquium on Power Conversion	77
A. V. Kalinin. Numerical Data in Science and Engineering	81
P. I. Boriskovskiy. New Investigations of the Paleolithic of India	85
In Memory of Academician A. I. Mal'tsev	90

SESSIONS, CONFERENCES AND MEETINGS

The USSR and Africa (Scientific Conference in Moscow). K. S. Kremen'	91
Problems of Contemporary Astronomy (Conferences in Gor'kiy and Kiev). V. A. Dubinskiy, B. V. Komberg, A. A. Nefed'yev, L. N. Bondarenko and G. S. Khromov	95
Investigations of Glassy Chalcogenide Semiconductors (Symposium at Leningrad). B. T. Kolomiyets	106
Scientific Problems of the Development and Automation of Transport (Conferences in Kiev and Leningrad). A. V. Gorinov and I. B. Andreyeva	108
The Theory of Machines and Mechanisms (Conference at Sukhumi). A. P. Barsanov and V. A. Dubrovskiy	113
The Radiation Chemistry of Organic Compounds (Conference at Moscow). V. V. Sarayeva	116
The Development of Investigations on the Chemistry of the Peptides (Symposium at Riga). A. A. Kiryushkin	120
Investigations of Soviet Zoologists (Two Sessions at Leningrad). P. V. Toront'yev	122

MEMORIAL NOTES, LECTURES AND SESSIONS

Two Jubilees of Mineralogical Science. G. P. Barsanov	125
The 90th Anniversary of the Birth of S. S. Nametkin	128

CHRONICLE AND INFORMATION

Jubilees of Scientists	130
Awarding of the Prize imeni V. G. Belinskiy	132
Problems in Studying the Productive Forces and Natural Resources of the Country	132
Expansion of Biological Investigations on the Barents Sea	134
Scientific and Organizational Decisions of the Presidium of the AS USSR	135

Available from JPRS 43956

Following is a complete translation of the Russian-language journal Vestnik Akademii Nauk SSR (English version above), Moscow, Vol 37, No 10, October 1967, pp 3-127. Original source page numbers accompany each article.

CONTENTS

	<u>Page</u>
ON THE FIFTIETH ANNIVERSARY OF THE GREAT OCTOBER SOCIALIST REVOLUTION	
I. I. Mints. Problems in the History of the Great October	1
V. A. Kovda. Soviet Science and International Scientific Collaboration	9
Ye. A. Belyayev. The Geography of Soviet Science	28
Ye. S. Likhtenshteyn. Books and Journals of the Academy During Fifty Years	39
V. A. Krasnov. The Jubilee Exhibition of the Academy	51
TEN YEARS OF THE COSMIC ERA	
G. V. Petrovich. The Motherland of Cosmonautics	61
A. A. Blagonravov and Yu. I. Zaytsev. Cosmic Investigations in 1966	72
THE OCTOBER AND SCIENCE	
S. I. Vol'fkovich. From the History of Soviet Chemistry	84
V. K. Voronovskiy and B. V. Levshin. The First Steps of Nuclear Physics	91
A. Ye. Ioffe. The Start of the International Scientific Relations of the Soviet Union	100
EXPEDITIONARY INVESTIGATIONS	
A. A. Aksenov and G. B. Udintsev. The Expedition of the "Vityaz'" and the "Academician Kurchatov"	110
New Ships of Science	116

(Contd)

Available from JPRS 43990

SESSIONS, CONFERENCES AND MEETINGS

The Socialist Revolution and the Unity of the World Historical Process (Session of the Scientific Council at Moscow). M. Ya. Gefter	117
Problems in the History of the Far East (Session in Vladivostok). A. I. Krushanov	122
Investigations of Diffusions on the Surface of Solids (Conference in Khar'kov). Ya. Ye. Geguzin	125
Results of the Development of Microbiology in the USSR (Session in Moscow). I. D. Kasatkina	126

CHRONICLE AND INFORMATION

The Gold Medals imeni M. V. Lomonosov	131
Awarding of the Prize imeni S. A. Chaplygin	131
The Development of Work in the Area of Agrochemistry and Soil Science	132
At the High-Mountain Stations for Study of Cosmic Rays	134

CRITICISM AND BIBLIOGRAPHY

Jubilee Works on the History of the October. Review by A. P. Nenarokov and V. I. Miller	138
The Series "Socialism and Communism". Review by V. S. Semenov and O. N. Trubitsyn	144

YEAR OF PUBLICATION XXXVII

EDITORIAL BOARD

Academician M. D. Millionshchikov (Editor-in-Chief),  
Academician V. P. Glushko, Academician A. A. Imsnenetskiy,  
Academician A. Yu. Ishlinskiy, Academician M. I. Kabachnik,  
Academician P. L. Kapitza, Academician M. V. Keldysh,  
Academician V. A. Kirillin, Academician M. A. Markov,  
Academician A. N. Nesmeyanov, Academician I. Ye. Tamm,  
Academician T. S. Khachaturov, Academician V. M. Khvostov,  
Academician M. B. Khrapchenko, Academician A. L. Yanashin,  
Corresponding Member of the AS USSR M. I. Agoshkov,  
Corresponding Member of the AS USSR V. V. Belusov,  
Corresponding Member of the AS USSR V. I. Gol'danskiy,  
Corresponding Member of the AS USSR V. L. Kretovich,  
Doctor of Economic Sciences B. G. Kuznetsov, and Doctor  
of Biological Sciences G. D. Smirnov (Deputy Editor-in-Chief)

Available from JPRS 43990



CONTENTS

	Page	Russian Reference
Reduction of Pulse Duration in a Resonantly-absorbing Medium of High Optical Density (E) . . . . .		
..... V. E. Khartsiev, D. I. Stasel'ko, and V. M. Ovchinnikov	965	52, 1457
On the Nature of the Order-disorder Transition in Ammonium Chloride (E) . . . . .		
..... A. V. Voronel' and S. R. Garber	970	52, 1464
Investigation of Neodymium-glass Laser Emission by the Moving-active-medium Method (E) . . . . .		
..... B. L. Livshitz and A. T. Tursunov	975	52, 1472
Investigation of Optical Properties of Shock Compressed Lead Glass (Elastic-plastic Wave in Glass) (E) . . . . .		
..... S. B. Kormer, G. V. Krushkevich, and K. B. Yushko	980	52, 1478
Magnetostriction of Single-crystal Terbium and Holmium Iron Garnets at Low Temperatures (E) . . . . .		
..... V. I. Sokolov and Than Duc Hien	986	52, 1485
Magnetic Properties of Rare-earth Iron Garnets in the Curie-point Region (E) . . . . .		
..... K. P. Belov, E. V. Talalaeva, and G. A. Yarkho	989	52, 1489
Rotational and Vibrational Energy Level Distributions of $N_2^+$ Ions Produced in Collisions Between Electrons and Nitrogen Molecules (E) . . . . .		
..... G. N. Polyakova, Ya. M. Fogel', and A. V. Zats	993	52, 1495
Relaxation and Nuclear Magnetic Resonance of Polarized $\beta$ -active Nuclei (E/T) . . . . .		
..... A. D. Gulko, S. S. Trostin, and A. Hudoklin	998	52, 1504
Stimulated Radiation from Atoms During Interaction of Cascade Transitions (T) . . . . .		
..... T. Ya. Popova and A. K. Popov	1007	52, 1517
Asymptotic Relations Between the Terms of Asymptotic Expansions of the Amplitudes of Crossed Processes (T) . . . . .		
..... Yu. Lombadze and S. Tokar'	1016	52, 1529
Finite-orbit Plasma Instability in Toroidal Systems (T) . . . . .		
..... O. P. Pogutse	1021	52, 1536
The Quantum Mechanical Harmonic Oscillator in the Phase Representation and the Uncertainty Relation Between the Number of Quanta and the Phase (T) . . . . .		
..... V. M. Faln	1027	52, 1544
The Problem of Three Bodies Interacting According to the Coulomb Law (T) . . . . .		
..... L. I. Ponomarev	1031	52, 1549
Dynamics of a Superfluid Fermi Gas at Finite Temperatures (T) . . . . .		
..... M. P. Kemoklidze and L. P. Pitaevskii	1036	52, 1556
Screening in the Atomic Photoeffect (T) . . . . .		
..... V. G. Gorshkov, A. I. Mikhailov, and V. S. Polikanov	1045	52, 1570
Magnetic Relaxation of Nuclei in Crystals Containing Magnetic Impurities (T) . . . . .		
..... G. R. Khutsishvili	1050	52, 1579
Scattering of Electromagnetic Waves by Neutral Fermi Particles (T) . . . . .		
..... I. M. Ternov, V. G. Bagrov, V. A. Bordovitsyn, and Ya. A. Markin	1054	52, 1584
Recombination of Electrons and Ions in Triple Collisions in a Dipole-molecule Medium (T) . . . . .		
..... F. I. Dalidchik and Yu. S. Sayasov	1059	52, 1592
Gamma Magnetic Resonance (T) . . . . .		
..... A. V. Mitin	1062	52, 1596
The Electrical Conductivity of Antiferromagnets (T) . . . . .		
..... L. N. Bulaevskii and D. I. Khomskii	1067	52, 1603
Some Features of the Interaction Between Short Laser Radiation Pulses and Matter (T) . . . . .		
..... F. V. Bunkin and A. M. Prokhorov	1072	52, 1610
Stability of Opposing-wave Regime in a Ring Gas Laser (T) . . . . .		
..... Yu. L. Klimontovich, P. S. Landa and F. G. Lariontsev	1076	52, 1616
Vortex Structure in Superconducting Films in a Parallel Field (T) . . . . .		
..... I. O. Kulik	1085	52, 1632

(Contd)

(Contents continued on inside back cover)

Available from American Institute of Physics

CONTENTS—Continued	Page	Russian Reference
Tunnel Recombination of Protons near the Surface of a Metal (T) . . . . .		
..... B. A. Trubnikov and Yu. N. Yavlinskii	1089	52, 1638
Nonuniform Current Distribution in Semiconductors with Negative Differential Con- ductivity (T) . . . . .		
..... A. F. Volkov and Sh. M. Kogan	1095	52, 1647
The Structure of Two-dimensional Flow Around Bodies in Dispersive Media (T) . . .		
..... V. I. Karpman	1102	52, 1657
Contribution to the Theory of Spontaneous Emission from Atoms in an External Field (T) . . . . .		
..... G. E. Notkin, S. G. Rautian and A. A. Feoktistov	1112	52, 1673
Phenomenological Theory of Second-order Phase Transitions (T) . . . . .		
..... G. V. Ryazanov	1122	52, 1688
Pair Production by a Photon and Photon Emission by an Electron in the Field of an Intense Electromagnetic Wave and in a Constant Field (T) . . . . .		
..... A. I. Nikishov and V. I. Ritus	1135	52, 1707
Contribution to the Theory of Field Emission from Metals. II (T) . . . . .		
..... F. I. Itskovich	1143	52, 1720
Radiation from a Non-equilibrium Plasma (T) . . . . .		
..... A. P. Dubovoi	1154	52, 1736
Spectral Properties of Lasers with a Large Angular Divergence of Light (T) . . . . .		
..... A. M. Ratner	1160	52, 1745
Theory of a Domain Wall in Metals under Conditions of the De Haas-Van Alphen Effect (T) . . . . .		
..... I. A. Priverotskii	1167	52, 1755
Author Index . . . . .	1173	52, 1764
Subject Index . . . . .	1188	52, 1775

Available from American Institute of Physics

N. P. Bogoroditskii  
A. M. Bonch-Bruевич  
S. E. Bresler  
V. M. Dukel'skii  
N. V. Fedorenko  
V. E. Golant  
G. A. Grinberg  
A. P. Komar  
B. P. Konstantinov

(Editor)  
Director,  
Institute of Physics and Technical Institute  
Academy of Sciences of the USSR,  
Leningrad

L. G. Loitsyanski  
G. V. Skorniyakov  
(Associate Editor)

# Soviet Physics TECHNICAL PHYSICS

A Translation of "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 37, No. 8, pp. 1365-1556, August, 1967)

Vol. 12, No. 8, pp. 993-1134

February, 1968

## CONTENTS

	PAGE	RUSS. PAGE
Electron Temperature Instability in an Inhomogeneous Plasma.		
A. B. Mikhailovskii . . . . .	(T) 993	1365
Collisions in a Turbulent Plasma. V. G. Makhan'kov and V. N. Tsytovich . . . . .	(T) 1003	1381
Currents Induced by a Moving Charge in a System of Conductors with Complex Loads. V. P. Pronin and L. A. Shekhtman . . . . .	(T/E) 1007	1387
Electrostatic Surface Waves in a Magnetoactive Plasma. V. I. Pakhomov and K. N. Stepanov . . . . .	(T) 1011	1393
Electrostatic Oscillations of a Cylindrical Plasma with Current Flow. S. E. Rosinskii and V. G. Rukhlin . . . . .	(T) 1017	1401
Electron Distribution Functions in a Low-Temperature, Molecular Gas Discharge. V. N. Soshnikov and E. S. Trekhov . . . . .	(T) 1026	1414
Density Waves Due to Interaction of a Modulated Beam and a Plasma. V. D. Shapiro . . . . .	(T) 1032	1422
Simulating Two-Dimensional Potential Fields with Specified Sources by the Electrostatic Induction Method (Induced Current). I. L. A. Shekhtman . . . . .	(T) 1039	1433
Diffraction of Electromagnetic Waves on a Skewed Lattice. V. P. Shestopalov . . . . .	(T) 1045	1442
Interaction of Two Radial Electron Currents. L. I. Korotun . . . . .	(T) 1053	1452
Equilibrium of Symmetric Plasma Configurations. É. I. Yurchenko . . . . .	(T) 1057	1458
Plasma Equilibrium in an $l = 3$ Stellarator with Circular Magnetic Axis. É. I. Yurchenko . . . . .	(T) 1059	1460
Measurement of Microwave Conductivity of the Turbulent Plasma in Alpha. M. M. Larionov and V. V. Rozhdestvenskii . . . . .	(E) 1063	1466
Investigation of a Turbulent Plasma by Microwave Methods. M. M. Larionov, V. V. Rozhdestvenskii, and A. D. Piliya . . . . .	(E) 1067	1471
Excitation of an Ion-Acoustic Instability in an Inhomogeneous Plasma. N. S. Buchel'nikova, R. A. Salimov, and Yu. I. Éidel'man . . . . .	(E) 1072	1477
Space-Charge Effects in a High-Frequency Gas Discharge. G. A. Anashkin . . . . .	(T/E) 1076	1481
Measurement of Electron Space-Charge Lifetime in a Magnetron Lens. B. S. Akshanov, Ya. F. Volkov, V. G. Zykov, B. P. Il'enko, N. I. Rudnev, and K. D. Sinel'nikov . . . . .	(E) 1081	1488

(Contd)

Copyright © 1968 by the American Institute of Physics

Available From American Institute of Physics  
Vol 12, No. 8, February 1968

Effect of Refraction and Absorption of the Medium on Transmission between Two Diagnostic Antennas in a Plasma. <u>I. E. Arsaev, B. E. Kinber, and N. N. Ivanchinov-Marinskii</u> .....	(T)	1086	1495
Coherent Amplification of Electrostatic Oscillations of a Bounded Magnetoactive Plasma by an Electron Current. <u>L. A. Shishkin</u> .....	(T)	1092	1503
Potential and Charged-Particle Density Distributions in a PIG Discharge. <u>L. V. Brzhechko and O. S. Pavlichenko</u> .....	(T/E)	1096	1508
Theory of Thermal Breakdown of Electrical Insulation Subject to Radioactive Emission. <u>N. P. Bogoroditskii and Yu. M. Volokobinskii</u> .....	(T)	1101	1514
Investigation of Optimum Resonators for a Single-Mode Laser. <u>I. M. Belousova and O. B. Danilov</u> .....	(E)	1104	1519
<b>BRIEF COMMUNICATIONS</b>			
Application of Surface Spark Discharge to Laser Pumping. <u>S. I. Andreev, M. P. Vanyukov, and E. V. Daniél'</u> .....	(E)	1110	1527
Channel Development in Surface Discharges. <u>M. P. Vanyukov and E. V. Daniél'</u> ..	(E)	1112	1529
Wavefront Reconstruction by Holograms Transmitted by Television. <u>I. S. Klimenko and G. I. Rukman</u> .....	(E)	1115	1532
Mass-Spectrum Pulse Shape in a Dynamic Quadrupole Mass Spectrometer. <u>G. I. Slobodenyuk</u> .....	(T)	1117	1535
Yield of a Simple Open Ion Source with Longitudinal Ionization. <u>G. I. Slobodenyuk</u> .	(T)	1121	1540
Nonstationary Flow of a Conducting Fluid in the Channel of a MHD Generator Subject to a Sudden Short Circuit. <u>A. I. Khozhainov</u> .....	(T)	1124	1543
<b>LETTERS TO THE EDITOR</b>			
Theory of Flexural Waves in Plates in an External Electric Field. <u>I. V. Ioffe</u> ...	(T)	1126	1546
Experimental Study of Short-Range Forces and Ionization Thresholds in Atomic Collisions. <u>V. B. Leonas and A. V. Sermyagin</u> .....	(E)	1127	1547
Spectral Measurement of the Distribution of Neutral Atoms in the Pinch in TM-3. <u>É. I. Kuznetsov</u> .....	(E/T)	1130	1550

Available from American Institute of Physics  
Vol 12, No. 8, February 1968

# INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

## - A -

Abashin, N.	13	Alfonso, Carmen R.	56
'Abaulah, 'Isma'il		Alfredo, Luiz	53
Sabri	46	Alfyorova, N. S.	100
'Abd al-Majid, Suleiman	48	Allain, Y.	105
Abderrahmani, Mohamed	40	Allakhverdov, M.	12
Abdrashitova, E. I.	134	Allegre, Jean	137
Abdullayev, Kh. Sh.	127	Almasan, Bujor	29
Abesadze, T. B.	93	Al'tshuler, T. S.	134
Ablyazov, L.	142	Al'tshuler, Yu. G.	133
Abramov, A. G.	115	Aluker, E. D.	129, 130
Abramov, R. V.	87	Amariglio, H.	84
Abramowicz, Maurice	119	Amelchenko, V.	19
Abramyan, E. A.	90	Amin, Mahmud	44
Accordo, A. F.	57	Anan'yev, Yu. A.	136
Acs, Lajos	26	Anan'yeva, A. A.	121
ad-Din, Khalid Muhyi	47	Anderson, C. E.	37
Adam, Manfred	33	Andreyev, A. P.	115
Adiyatova, Zh. F.	67	Andreyev, G. A.	133
Adrianova, L. Ya.	135	Andreyev, N. N.	103
Adronikashvily, E. L.	127	Andronikashvily, E.	136
Afanasenkov, A. N.	132	Andronikashvily, E. L.	125
Afonin, N.	6	Anfilov, V.	18
Afrikantov, I. I.	126	Anfilov, Ye. A.	96
Agafonov, N. T.	15	Angeleyko, V. V.	135
Agafonov, V. P.	57	Angelov, A.	3
Aganbegyan, A.	5	Anis, Muhammad	46
Aganin, M.	8	Anokhina, I. P.	67
Ageyev, D. V.	93	Antal, Zoltan	26
Ahmed, Ibrahim	42	Antman, D. G.	83
Airiney, S.	88	Antonov, V. V.	63
Akhtarov, Zl.	143	Antoshchenko, I. M.	115
Akimi Suzuki,	80	Antuf'yev, V. M.	131
Akiro Ono,	122	Anufriyenko, S.	2
Aksentsev, S. L.	64, 73	Aparedido, Jose	53
Akulinichev, I. T.	74	Apel, Hans	25
Alanassov, K.	33	Apostolov, Evgeni	35
Al'ber, S. I.	112	Apostolovic, I.	31
Aldea, M.	36	Apro, Antal	27
Aleksakhin, I. A.	100	Aptekar', S. G.	76
Aleksandrov, B. V.	95	al-'Aqad, Salah	44
Aleksandrov, L. N.	74	Arbuzov, B. A.	82
Aleksandrov, V. V.	96	Arin', E.	95
Aleksenko, G. V.	92	Aripova, D. F.	65
Alekseyev, A.	11	Arkhangel'skiy, Yu. B.	90
Alekseyev, N. I.	102	Arkharov, V. I.	100
Alekseyev, S. N.	99	Arkhipova, V. R.	76
		Arnold, K.	88
		Aronov, B. M.	139

Arpent'yev, V. A.	8
Artelt, P.	106
Artobolevskiy, I. I.	114
Artyukhov, V. G.	83
Artzibashev, V. A.	83
Asadullin, Ya. Ya.	134
Ashkinazi, M. S.	66
Astakhov, K. G.	123
Astashenkov, P. T.	18
Atanasescu, Radu	29
Atanasiu, G.	89
Atayev, S. S.	114
Auge, Martin	33
Avayev, V. N.	128
Avdeyev, Ye. F.	135
Avetisyan, Dzh.	92
Avrayamov, Yu. S.	131
Avrukh, A. Ya.	16
Ax, Peter	79
Ayzenberg, G. Z.	123
Ayzerman, M. A.	93
Azhavskaya, F. M.	70
Azizov, Yu. M.	66
Azouzi,	42
Azovkin, I. A.	11

- B -

Babareko, A. A.	99
Babayev, T.	58
Babich, D. V.	132
Babitskiy, A. A.	115
Babskiy, E. B.	68
Backe, W.	118
Badareu, E.	137
Baehr, W.	85
Bagayev, A. N.	82
Bagrinovskiy, K.	5
Bajic, Milan	30
Bakanov, M.	1
Bakharevich, N. S.	133
Bakhman, N. M.	139
Bakhtin, V. A.	110
Bakhvalov, N. S.	109
Bakhvalov, V. M.	120
Bakul', V. N.	14
Balanin, B. A.	116
Balashov, Ye.	94
Balaton, I.	97
Baltmugur, K. K.	125
Ban, Akos	88
Band, I. B.	83, 136
Barebanov, L. G.	7
Barabanov, N. V.	115
Baral, A. A.	87

Baramidze, Zh. I.	115
Baranov, A.	4
Baranov, E. F.	16
Baranov, V. I.	124
Baranova, L. I.	134
Baranovskiy, P. G.	121
Barashev, Pavel	69
Barashko, A. S.	90
Barbov, Toma	22
Barca, Luciano	27
Baric, Branko	31
Barkovskiy, N.	2
Baroyan, O. V.	76
Barry, A.	44
Barsukov, M. I.	67
Bartos, J.	96
Bartoshevich, Yu. E.	64
Baryshev, Yu. V.	135
Bascunan, Sergio Silva	53
Bashilov, I. P.	90
Bashkatov, Yu. N.	131
Bashkin, V. A.	57
Basov, M. G.	133, 135
Batev, T.	120
Baturinskaya, N. L.	103
Bechtle, Friedrich	33
Bednyagin, A. I.	19
Bedrinskiy, A. A.	98
Beeckmans, Rene	42
Beer, H. P.	108
Behounek, R.	89
Bekacem, K.	41
Bekir-Zade, N. B.	90
Beletskiy, V. V.	140
Belik, G. I.	95
Beljakow, W.	5
Belkind, A. I.	129
Bell, L. N.	67
Belov, V. G.	72
Belova, Z. S.	83
Beloysov, A. S.	68
Belyakov, A.	14
Belyayev, A. F.	139
Belyayev, V. N.	114
Belyi, V. D.	121
Benedikt, Otto	97
Benko, Yu. K.	70
Beraha, R.	124
Beregovkin, A. V.	74
Bereza, V. G.	15
Berezin, N.	1
Berger, Rolf	25
Berkhout, C. F.	104
Berlin, A.	9
Berlin, A. A.	122

Berlogea, O.	36
Bernard, P.	118
Berri, L.	5
Bertolino, Jean	50
Berzin', B. Ya.	130
Bezrukikh, V.V.	141
Bick, K.	107
Biclawski, Stanislaw	98
Bieda, W.	109
Bigishev, V.	4
Biryukov, A.	113
Bishchcfff, C.	25
Bizri, Afif	46
Blagoeva, Nedyalka	35
Blagojevic, Obren	30
Blank, G.	2
Blaumberg, I. V.	75
Blokhin, L. G.	116
Blokhin, N. N.	68
Blyumin, G. D.	120
Blyumin, I. Sh.	69
Bobbert, D.	107
Bobkov, A. G.	72
Bobrovich, V. P.	73
Bodanskiy, M.	117
Boeck, H.	25
Boehkarev, I. A.	10
Boenisch, D.	84
Bogdanov, A. V.	132
Bogdanov, G. A.	70
Bogdanov, M.	13
Bogdanova, N. P.	68
Bognar, Geza	143
Boldyrev, E. A.	92
Bolonkin, A. A.	57
Bolotin, V. V.	135
Bolotnikov, A. N.	87
Bol'shakov, G. F.	135
Bol'shakov, I.	3
Bombi, Giuseppe	
Giorgio	85
Bondaletov, G. P.	93
Bondarenko, V. K.	9
Bondarev, E. N.	110
Bonnafe, Pierre	44
Bonnerot, J.	105
Borisevich, V. A.	126
Borisov, B.	14
Borisov, E. K.	116
Borisyuk, Yu. H.	81
Boros-Gyevi, Janos	97
Borowicz, Artur	28
Borychev, I.	2
Borzova, T. V.	103

Bosch, R.	98
Bouchard, J.	128
Boyadzhiev, S.	77
Boyarchuk, Yu. M.	66
Boytsel, V. V.	7
Bragin, A. A.	127
Brandts, J.	106
Bratchenko, B. F.	6
Brechling, J.	113
Brekhov, K. I.	15
Brekke, H. A.	39
Brendakov, V. F.	124
Brestkin, A. P.	66
Breus, T. K.	141
Brik, I. L.	67
Brin, G. P.	73
Brodskiy, S. Ya.	9
Brokopf, W.	105
Brown, D. E.	109
Bruchhaus, Eva-Marie	40
Bryanskaya, E. K.	82
Bryzgalov, V. I.	127
Brzhevskaya, O. N.	66
Bubanj, V.	34
Eubke, O.	34
Budagyan, F. Ye.	75
Bugaytsov, L.	13
Bugnariu, Tudor	32
Bui Huy Dap,	58
Bui Van Ba,	81
Bul', P. I.	70
Bulash, M.	5
Bulatova, R. F.	65
Bulgakov, V. V.,	110
Bulgaru, M.	36
Bulgaru, Mircea	29
Bunich, P.	4
Bunning, E.	144
Burda, L.	137
Burdzinski, Z.	119
Burgasov, P. N.	76
Burgo, Yu. D.	112
Burkin, I. A.	67
Burlakova, Ye. B.	65
Burmistrov, Yu. M.	65
Burov, M. I.	60
Buslavskiy, V. G.	60
Butenko, Anatoli P.	32
Buyanov, P. V.	74
Bykov, V. L.	140
Byskin, Ye. A.	74
Bystrov, A. I.	95

Cabak, I.	105
Cabral, U. Quaranta	105
Cadek, J.	102
Cademartori, Jose	55
Caicedo, A. H.	55
Cap, A.	104
Capdevila, C.	86
Cardinaud, R.	78
Carre, J. C.	128
Castro, Ruy	54
Cervenka, Otomar	31
Cervenka, Premysl	35
Chalmayev, V.	19
Chalykh, Ye. F.	103
Champeix, Louis	84
Chao, Chung-Yao	128
Charles, Bernard	44
Chashchim-Semenov, K. V.	122
Chaudrin,	143
Chechurina, E. N.	143
Chen Ch'in-ts'ai,	77
Chen, Ching-San	86
Cherniak, N. B.	75
Chernitskiy, Ye. A.	73
Chernov, N. N.	121
Chernyak, N. I.	104
Chernyak, R. Ka.	91
Chernyi, V. G.	103
Chertorogov, P.	12
Chervayovskiy, A. Ts.	10
Chervinskiy, V.	2
Chesnokov, D.	17
Chestnoy, U. N.	71
Chi, Ch. T.	110, 111
Chi I-chai,	77
Chiang Ch'ing-fen,	77
Chichinadze, M. V.	120
Ching Yao,	122
Chirakadze, A.	15
Chistyakov, N.	2
Ch'iu Chi-hsien,	112
Chkheidze, M. V.	93
Cho Kyong-ok,	53
Chodakowski, A. M.	80
Chon Myong-bok,	51
Chou Han-chang,	77
Chuchkin, V. G.	69
Chuchmarev, S. K.	100
Chudnovskiy, G. E.	115
Chuiko, A. V.	102
Chukanova, T. I.	64
Chumakov, M. P.	70
Chuyev, Yu. V.	18
Cirillo, M.	108
Ciurileanu, Radu	28

Claussen, N.	84
Cohen, Aharon	48
Colella, A. Centi	79
Conrad, O.	106
Constantin, Ionescu	29
Constantinescu, V. N.	120
Coquel, Marcel	42
Coupette, W.	106
Creutzberg, Ulrich	118
Crombet, Jaime	54
Cseh, S.	102
Cucu, V.	28, 36
Czikos-Nagy, Bela	26

- D -

Dallos, Ferenc	25
Damnjanovic, Konstantin	113
Damyanov, Damyan	117
Danciu, C.	28
Dang Hanh Khol,	81
Dang Tran Thi,	51
Daniko, S. G.	57
Danilov, B. P.	99
Danilov, V. I.	65, 66
Danilov, Yu. Ye.	75
Danilova, A. I.	71
Danno, A.	128
Darov, Ye. T.	114
Daskalov, Khristo	58
Daulenov, S.	13
Davidescu, S.	29
Davitaya, F. F.	60
de Andrade, Theophilo	54
deBoo, J.	38
de Castro, Josul	53
de Genies, Salgues H.	40
Deger, M.	109
Begos, R.	78
Degterev, A. A.	101
Dekhovitch, D. A.	139
de Laffolie, H.	106, 137
Delgerjab, O.	50
Demchenko, V.	3
Dement'yev, G. P.	70
Demidov, A. M.	125
Demidovich, E. G.	61
Demin, A. V.	94
Demina, N. B.	121
Derebeyev, I. K.	93
Deri, Tibor	25
Dermendzhyev, Docent Ivan	31
de Wit Greene, Andres G.	56
Diaz, Joaquin Moreno	55



Didenko, O. I.	109
Dimant, I. H.	64
Dimentberg, M. F.	115
Dimitri, Adib	46
Dimitrov, Dimitur	21
Dimitrov, St.	77
Dimitrov, Vasil	31
Diop, Abdoulaye Bara	43
Dippel, Th.	140
Dirikis, M. A.	60
Djurbabic, M.	31
Dmitriyevskiy, A. A.	140
Dmitryev, M. T.	67
Dobrokhotoy, V. D.	120
Dobryakov, Yu. I.	116
Dobynde, I.	12
Docent,	80
Doerr, Michel	143
Dohos, V. Ye.	86
Dokov, Dimitur	117
Dolgalev, A. A.	82
Dolgov, V. M.	126
Dolgov-Savel'yev, G. G.	129
Dolidze, T. V.	93
Donchev, I.	33
Donda, Habil Arno	25
Doolotoliyev, S.	103
Dorogov, B. S.	98
Doroshenko, V.	16
Doroshevich, M.	133
Doshchenko, N. M.	68
Dovijanic, Predrag	36, 81
Draganov, Dragan	22
Drobnis, A.	12
Drozd, Krystyna	36
Drugov, Yu. V.	67
Dubinin, N. P.	75
Dubovikov, B.	3
Dudszus, A.	24
Dudyrev, A. F.	99
Duhamel, Alain	38
Dul'nev, G. N.	131, 132
Dumont, Rene	42
Dureux, Jean	40
Durr, K.	32
Dusova, Eva	22
Duval, Z.	84
Dvornikov, I.	7
D'yachenko, V.	15
Dykin, V.	4
Dynshits, V.	14
Dyskin, Ye. A.	74
Dyunayev, R. A.	126
Dzhaparidze, Ye.	11
Dzhumadilev, A.	12

- E -

Ebeling, F.	107
Ebersbach, G.	106
Egon, Oszetsky	27
Egorov, A. S.	87
Ehrlich, Wolf	56
Eisenlohr, H.	34
Elango, M. A.	129
Ellermann, V.	78
El'perin, I. T.	135
Elsaesser, H.	60
Emel'yanov, Yu. M.	84
Emmerickh, G.	13
Endovitskiy, I. I.	110
Engler, G.	140
Enkelmann, Kurt	2
Erbacher, F.	128
Eriksen, Tom	118
Ershova, L. S.	103
Erwall, L. G.	109
Eskin, V. Ye.	66
Etemekdzhiyan, A.	16
Everte, A. K.	130
Eydel'man, M.	6

- F -

al-Fahham, Ibrahim	48
Fasolyak, N.	14
Fast, N. P.	61
Fastovskiy, V. G.	139
Fazekas, Ferenc	79
Fedorov, E. K.	60
Fedorov, G. A.	124
Fedorov, S. S.	70
Fedorova, T. B.	142
Fedoseyev, V. A.	134
Fedyayev, V. E.	9
Fel'dbaum, A. A.	118
Feraru, I.	80
Ferrada, Alejandro	
Cabrera	54
Fesenkoy, V. G.	60
Feuerstein, P.	39
Feygel'son, T. S.	112
Filanovskaya, T. P.	65
Filatov, A. N.	74
Filipovic, Marijan	145
Filippov, N. V.	129
Filippov, Yu. V.	84
Fil'kov, V. G.	90
Pinogenov, B. S.	91
Fiquet, Jacques	122
Firsov, M.	12

Firsov, V.	8, 15
Fischer, E. A.	128
Fischer, H.	25
Fischer, J.	108
Fishman, B. Ye.	1
Fishman, S. N.	64
Fistie, Pierre	50
Fitsner, L. N.	92
Flakserman, Yu. N.	98
Flerov, G. N.	142
Flick, K.	106
Florent'yev, L.	9
Fock, Jenö	27
Fomin, V. N.	136
Fontaine, Andre	43
Forero, Paulo E.	53
Fortushenko, A. D.	123
Foumenteze, J. L.	105
Foure, M.	104
Franchimont, Claude	56
Frank, G. M.	66
Frankler, Czeslaw	27
Freddi, Riccardo	85
Freidlin, M. I.	109
Freydlin, S. Ya.	72
Fridman, E. Ye.	6
Fritsch, H.	118
Frumkin, A.	8
Fu Ch'en,	118
Fujii, Y.	80
Funke, P.	107
Furmanov, B. M.	139
Furno, A.	79
Furtado, A. H.	53
Fuseva, L. G.	90
Fuzessery, B.	26
Fuzi, Erno	26

- G -

Gabjan, Jozef	28
Gagloyev, V. N.	74
Gahrton, Per	39
Galatsan, V. N.	98
Galetskaya, R.	6
Galiyev, Sh. U.	57
Galkin, N. P.	103
Gallo, A.	108
Galynker, I. S.	102
Ganassi, Ye. E.	65
Ganin, V. S.	76
Garashin, V. R.	102
Garbuzov, B.	16
Gassama, Abdou	40
Gastaut, H.	78

Gauvenet, Andre	128
Gauze, G. G.	64
Gavazov, Syuleyman	35
Gavrilov, A.	6
Gaylitis, M. K.	134
Gebhardt, Erich	85
Gedeonov, L. I.	86
Geiseler, G.	138
Gemel, Antoni	58
Gendon, Yu. Z.	76
Georgadze, M. V.	66
Georgiev, G.	35
Gerasimov, K.	2, 11
Gerasimov, V. D.	65
Geringer, F.	32
Ghanem, 'Adel Hafed	48
al-Ghazzali,	
'Abdul-Mun'am	46
Ghetau, V.	36
Ghita, A.	32
Gil-chenok, M. Ya.	136
Gil'derman, Yu. I.	110
Gilinskiy, S. M.	139
Gillemot, Laszlo	119
Ginevskiy, A. S.	132
Gintsburg, L. Ya.	7
Ginzburg, I. P.	117
Giosan, Nicolae	29
Gjeci, Vangjel I.	20
Gladkov, N. A.	70
Glagolev, A. I.	132
Glagolev, V. L.	126
Glebovskaya, V. S.	87
Gleiter, H.	105
Glezin, M. D.	114
Glotov, I. A.	91
Glukhova, A. I.	102
Glushkov, Nikolay	
Timofeyevich	6
Glushkov, V. M.	143
Gluz, M. M.	19
Goedecke, F.	108
Gogoberidze, M. G.	93
Gokhshtein, M. B.	101
Gol'dat, S. Yu.	64
Goldin, M. A.	87
Gol'din, R. B.	77
Gol'dshtein, M. I.	101
Golomeev, Ivan	22
Golovanov, B. Yu.	126
Golovanov, L. B.	131, 133
Golubev, B. P.	83, 126
Gonidec, J. P.	128
Gonidou, R.	136
Gorecki, W.	109

Gorissen, E.	106
Gorizontov, B.	13
Gorizontov, P. D.	69
Gorobinskiy, S. M.	127, 128
Gorshkov, S. G.	18
Goryachevaya, R. I.	82
Goryunov, P. N.	117
Gospodinov, Radko	21
Goussev, N. G.	81
Grafov, L.	3
Gragic, Dorde	34
Grammakov, A. G.	87
Graul, E. G.	79
Grdina, Yu. V.	100
Grechukin, D. P.	129
Grecu, A.	28
Greiner, E.	106
Gribova, Z. P.	73
Grinberg, R.	142
Grishayev, I. A.	90, 136
Grishin, N. I.	60
Grokholskiy, A. L.	122
Gromov, N. K.	98
Gromov, V. V.	125
Groshev, L. V.	125, 139
Grother, H.	85
Grotrian, W.	137
Grozdev, D. M.	70
Grudev, F. I.	71, 77
Grueva, Docent Evg.	21
Grun, M.	140
Gruzin, P. L.	133
Gubatova, D. Ya.	125
Guiraud, J. P.	57
Gukov, V. I.	7
Gundlach, W. R.	137
Gurenishvily, G. Ye.	90
Gurovskiy, N.	141
Gurshteyn, A. A.	59
Gurushkin, V.	8
Gurvich, A. M.	69
Gurvich, L. L.	121
Gus'kova, N. I.	127
Gutierrez, Carlos M.	56
Guys, V.	3
Guzhkov, I.	1
Gy, P.	105
Gzhelyak, R. A.	122

- H -

Ha Huy Giap,	52
Haapanen, Aimo	38
Hachihama, Y.	85
Hacohen, Eliezer	47

Hajazi, Ahmad	48
Hajek, Jiri	32
Hanle, W.	79
Hanus, B.	97
Harde, R.	128
Harsim, E.	13
Hartmanshenn, Oliver	84
Hasani, Hasan	44
Hasek, B.	118
Hashitani, H.	140
Hasigan, D.	36
Hatos, Emil	29
Hegedus, Andras	36
Hegna, J. B.	39
Helmholz, E.	33
Hendryk, Jerzy	17
Herbst, Walter	78
Herceg, Tomislav	30
Hermodsson, Elisabeth	39
Hernandez, Gregorio	51
Herrmann, D.	118
Heyser, A.	97
Hideo Fujie,	128
Hiroji Mochizuki,	119
Hirschfeld, J. P.	97
Ho, Che-hui	128
Hoffman, Heinz	34
Hoffmeister, H.	106
Hofmann, Lothar	79
Hohfeld, T. H.	24
Holup, V.	33
Holzgruber, W.	105
Hong Ha,	52
Hong Ye-sik,	49
Hopker, Wolfgang	32
Horvath, Sandor	26
Horvath, Tiberiu	29
Houzfils, Ada	47
Hoxha, Ismail	35
Hradecky, Adolf	31
Hsu Jui-t'ing,	77
Hu Xue-mei,	62
Huang, T. K.	88
Huck, G.	106
Huelzenbecher, E.	144
Hugel, Helmut	138
Huhtanen, I.	137
Huizinga, M.	105
Huml, P.	104
Hummitsch, W.	107
Hussy, B.	107
Huxtable, A. L.	144
Huy Thanh,	50
Hyon Chin-ch'ol,	51

- I -

Ignatova, N. P.	82
Il'ina, A. N.	65
Il'inskiy, N. D.	121
Imamura, M.	86
Indenbom, M. L.	84
Inoue, T.	138
Ioyrish, N. P.	69
Irrgang, B.	97
Isakov, V.	1
Isakov, Yu. F.	72
Isayev, R. N.	84
Ishmayev, S. N.	127
Isotani, M.	108
Israel, L.	78
Issa, Abdurrahman Mohamed	44
Itskovich, G. M.	99
Ivakhnenko, O. H.	96
Ivanchenko, V.	3
Ivanov, A. A.	95
Ivanov, B. G.	87
Ivanov, Dimitur	22
Ivanov, I. D.	73
Ivanov, V. V.	59, 109
Ivanov-Smolenski, V. A.	93
Ivanova, O. A.	110
Ivanova, T. G.	127
Ivanova, Ye. P.	15
Ivashchenko, Ya. N.	82
Ivashkevich, T. M.	87
Iwasaki, I.	86
Izimbetov, T.	20
Izrael'son, Z. I.	87
Izvol'skaya, N.	4

- J -

Jablonsky, W.	34
Jahn, Rolf	25
Janik, I.	104
Jankovic, Ljubomir	31
Janku, Vladimir	32
Janos, C.	27
Janos, Frantisek	22
Jaraquemada, Pedro Pablo	55
Jaric, Milos	30
Jarikow, N. N.	71
Jaroszk, Jerzy	27
Jaschnov, V. A.	70, 77
Javady, Ali-Asghar Haj Seyyed	48

Jech, J.	104
Jilek, L.	104
Jimenez, B.	139
Joannes, Victor	56
Johswich, F.	85
Joita, Emilia	29
Jovanovic, Djordje	31
Jozkiewicz, S.	137

- K -

Kabulov, V. K.	94
Kachanov, L. M.	120
Kachanov, V. A.	104
Kacher, Kh.	8
Kadinov, E. I.	100
Kagan, A. M.	111
Kagan, R. L.	61
Kaganov, V. Yu.	100
Kaganova, T. I.	115, 121
Kalashnikov, A.	13
Kalekin, O. Yu.	115
Kalendarev, R. I.	129
Kalinin, A. I.	130
Kalinin, S. V.	117
Kalinov, Stefan	21
Kallauke, Martin	33
Kalyayev, A. V.	96
Kamakin, N. M.	82
Kamay, Gil'm	82
Kamenetskiy, V. R.	131
Kammerer, Yu.	19
Kammori, O.	108
Kanayev, A. A.	117
Kandidov, V. P.	122
Kanellakopoulos, B.	85
Kang Tok-so,	51
Kaniskin, V. A.	101
Kantorovich, R. A.	76
Kaplan, D. A.	92
Kaporulin, K. N.	94
Kaptsevich, A.	17
Kapustin, S.	142
Karabekov, V.	1
Karageorgy-Alkalayev, P. M.	131
Kargu, L. I.	120
Karlova, M.	4
Karpushkina, Ye. I.	129
Kashcheyev, V. N.	126, 132
Kashevarov, Yu. B.	123
Katkova, N. V.	63
Kaufman, B. D.	75
Kavalerov, A. A.	18

Kavalskiy, V. V.	83
Kawashima, I.	108
Kaya, Souin	49
Kazachkovskiy, O. D.	126
Kazakov, V.	3
Kazakova, M. V.	121
Kazantsev, A. N.	60, 141
Kazarnovskiy, M. V.	125
Kazlauskas, P. A.	130
Kedersteger, Karl	88
Kedziorkowa, Felicza	28
Keita, Modibo	42
Keldysh, M.	17
Kessel', A. R.	134
Kessler, Heinz	33
Ketebayev, K.	11
Keyneman, Peter	17
Khabibullin, B. M.	134
Khachatryan, L.	11
Khafif, Muhammad	46
Kharkevich, A.	19
Kharlamov, P. B.	111
Al-Khauili, Liftfi	48
al-Khawli, Lutfi	47
Khaykin, N.	7
Khentov, A. A.	59
Khiari, A. R.	41
Khodarev, Yu.	94
Khodzhayev, Sh.	12, 16
Khokhlov, A. S.	64
Khokhlova, L. V.	111
Khol, Jiri	22
Khol, Lotfi EL	45
Khomutov, S. M.	140
al-Khowla, Lufti	45
Khrgian, A. Kh.	60
Khromov-Borisov, A. V.	84
Khudoyarov, I.	72
Khudyakov, S. N.	20
Khundanov, L. Ye.	76
Khvan, E. A.	95
Khvostov, V. M.	63
Kikolov, A. I.	74
Kil'shtedt, K. K.	15
Kim Chong-song,	51
Kim Ki-yong,	51
Kimel, L. R.	128
Kirko, I. M.	104
Kirsanova, G. I.	68
Kiselev, A. Ye.	69
Kiselev, V. K.	9
Kiseleva, G. A.	64
Kisilev, B.	10
Kislyakov, Yu. Ya.	90

Kissel, P.	78
Kitsenko, A. B.	135
Kitzing, L.	33
Kivisto, Kalle	38
Kleinhauer, Enno	78
Klenov, Yef.	4
Klimko, H.	5
Klimov, A.	8
Klos, Heinz	24
Klyarfel'd, B. N.	90
Kmorowics, Lazlo	26
Kneiske, G.	118
Knizhnikov, V. A.	125
Knuppel, H.	107
Ko Jun-sheng,	62
Ko Yong-tok,	51
Koarouaoc, A. I.	6
Kobayashi, K.	138
Kobayzhi, T. S.	80
Kubyakovskiy, N. F.	101
Kobzar', M. T.	96
Kochenov, I. S.	134
Kocheryzhenkov, G. V.	117
Kochetkov, O. A.	81
Kochikyan, V.	8
Kocho, V. S.	100
Kocourek, Zd.	105
Koczy, A.	118
Kodama, T.	80
Koenk, H.	24
Koev, Vasil	35
Kogan, M. N.	110, 131
Koichi Kanna,	80
Kokhonov, F.	11
Kolb, K.	105
Kolbusz, Franciszek	28
Kolebayev, A.	2
Kolesmikoff, G. G.	6
Kolesnikov, Yu. A.	129
Kolesov, A. K.	60
Kolev, Krachun	21
Kolmogorov, A. N.	110
Kolontsova, Ye. V.	125
Koleskova, N. G.	133
Kolsung, Leif E.	119
Kolton, G. A.	135
Kol'tsov, V. V.	120
Komar, Antoni	27
Komar, I. V.	15
Komarek, V.	97
Komissarov, V. M.	132, 133
Komissarzhenkaya, G. F.	88
Konakh, N.	68
Kondratyuk, I. A.	125

Konev, I.	17	Kozlova, I. G.	136
Konev, S. V.	65, 69	Kraft, Arne V.	79
	73	Kraft, G.	108
Konig, G.	108	Krainer, H.	108
Konishev, P.	58	Krall, E.	58
Konstantinov, Yu.	4	Kralle, Gerhard	138
Kopineck, H. J.	107	Kramer, E.	144
Kordyum, V. A.	68	Krasil'nikov, S. N.	17
Korneyev, A.	7	Krasnosel'skiy, M. A.	110
Korobeynikov, V. P.	121	Krasnovskiy, A. A.	73
Korobeynikov, Ya.	126	Krasovitskiy, V. B.	130
Korol', V.	17	Krasovskiy, V. I.	61
Korolev, P.	143	Kraszewski, A.	97
Korotkina, M. R.	110	Kratky, V.	96
Korotkina, O. Z.	66	Kraus, Bozidar	36
Korotkov, V. B.	110	Kravchenok, N.	142
Korotkov, V. K.	115	Kravets, L. G.	62
Korshunov, A. P.	16	Krein, M. G.	110
Korshunov, Yu. M.	109	Kreisch, Horst	118
Kosarev, Ye. L.	92	Kreynin, S. I.	96
Koshelev, P. F.	100	Krieyev, G. B.	133
Koshevoy, V. N.	141	Krisch, A.	106
Koshkarev, A.	5	Kristapson, Ya. Zh.	129
Kossov, O. A.	92	Kristich, V. A.	131
Kossov, V. V.	16	Kriviskiy, A. S.	74
Kossovskiy, V. G.	114	Krivoshayev, A. E.	100
Kostandov, L. A.	12	Krivoskeyen, M. I.	143
Kostin, K. F.	93	Krivy, I.	81
Kostmann, Jenoe	32	Kronis, Ya.	123
Koustousov, A. I.	7	Krstinic, Mirjana	36
Kostyukov, N. S.	95	Kruelle, Gerhard	140
Kosyachenko, G.	15	Kruglyak, I.	13
Kosygin, A.	3	Krumbiegel, D.	58
Kotev, G.	77	Krupchatnikov, V. M.	117
Kotly, M.	90	Krupotkin, Y. M.	101
Kotlikov, Ya.	2	Krupyanko, V. I.	66
Kotrc, J.	23	Krustanov, Khristo	21
Kovacs, Lajos	26	Krustev, Kr.	22
Kovacs, Sandor	27	Krustinov, G.	77
Kovalenko, G.	1	Kruzhkov, S. N.	110
Kovalenko, V. F.	83	Krylov, G. N.	87
Kovalev, A.	12	Krylov, P.	4
Kovalev, L. I.	116	Krylov, Ye. P.	139
Kovalevskiy, V. A.	90	Krynicky, Marian	119
Kovaliov, V. V.	71	Krynova, R. V.	83
Kozelsky, F.	121	Kuan Shan-yuan,	49
Kozhevnikov, Yu. V.	57	Kucner, Tomasz	58
Kozik, B. L.	139	Kudrin, A. N.	64
Kozinets, B. N.	135	Kugayevskiy, A. F.	122
Kozlov, N. A.	136	Kugler, G.	118
Kozlov, V.	11	Kuhne, Habil	
Kozlov, V. N.	74	Harald-Dietrich	24
Kozlov, Ye.	3	Kuhnelt, G.	106
Kozlov, Yu. I.	114	Kulagin, L. V.	140

Kulik, I. O.	136
Kulikov, V.	15
Kul's'ka, O. A.	82
Kumbiliv, Georgi	22
Kunayev, V. K.	102
Kuneva, Velichka G.	21
Kunitomi, M.	138
Kunststoff, Bonner	104
Kuosa, M.	128
Kuperov, L. P.	87
Kupriyevich, V. A.	65
Kuptsov, L. P.	110
Kuramzhin, A. V.	114
Kurilova, Yu. V.	61
Kurota, K.	108
Kurt, V. G.	59, 126
Kusata, T.	80
Kutateladze, S. S.	136
Kutikov, L. M.	112
Kuz'min, V. I.	103
Kuznetsov, G. I.	60
Kuznetsov, I. A.	66
Kuznetsov, M. A.	9
Kuznetsov, N. N.	110, 111
Kuznetsov, R. A.	130
Kuznetsov, V. A.	127
Kuznetsov, V. I.	142
Kuznetsova, G. A.	72
Kuzub, V. S.	104

- L -

Laborit, H.	78
Ladukas, Cheslovas	14
Lagunov, I. I.	142
Lagutkin, V.	14
Lahoda, Thomas	31
Lai Ching-wen,	112
Lakhtin, G. A.	142
Lakshmanan, R.	106
Laktionov, A. F.	62
Laletin, N. I.	127
Lallement, Robert	84
Lalov, Khristo	35
Lang, Nicolas	42
Langerweger, J.	105
Lapin, B. A.	68
Lapshin, V. G.	57
Laptev, G. F.	20
Laptev, V.	14
Larabi, Hachemi	40
Lashevskiy, R. A.	96
Lavrent'yev, M. A.	143
Lavronenko, Ye. Ye.	116
Layzan, V. B.	130

Lazarev, L. P.	57
Lazarov, Georgi	21
Le Chan Phuong,	52
Le Hien Mai,	52
Le Quang Tuan,	52
Le Trong Tuc,	89
Le Vert, P.	37
Lebedev, V. I.	127
Lebedeva, L. P.	110
Leclerc, J. C.	78
Lee, Susana	53
Lei Hsing-Han,	77
Leksin, Vladimir Nikolayevich	103
Lemaire, W. C.	39
Lemekhova, Ye. N.	59
Lengyel, Bela	144
Lenskiy, V. S.	122
Leonov, M. P.	61
Leont'yev, A. I.	136
Lependin, L. F.	65
Lepin, I. R.	100
Lesechko, M.	11
Leskin, A.	83
Leutz, Herman	118
Levente, Mihail	28
Levin, A.	4, 113
Levin, A. V.	113
Levin, V. I.	113
Levin, Ye. Ye.	140
Levina, Ye. N.	76
Levinson, I. B.	130
Levitin, I. B.	120
Levitin, V. V.	103
Levkovich, Ye. N.	70
Levshin, V. L.	94
Leypunskiy, A. I.	125, 126
Lhospied, P.	105
Liberman, Ye. A.	66
Liman, G. F.	127
Lin Ch'en,	49
Lin Pin,	49
Lin'kova, Ye. A.	67
Linnik, Yu. V.	111
Lipavsky, Jan	31
Lipovetskiy, L.	9
Lipstein, R. A.	93
Lisenenkov, I. P.	95
Lisichkin, S.	12
Lisitsyn, Yu. P.	71
Lisovskaya, G. M.	64
Litvinova, M. P.	68
Liu, Jen-wei	137
Livshits, M. I.	110
Livshits, V. B.	101

Llyd'ya, G. G.	129
Lizentsev, N. M.	67
Ljubicic, Nikola	30
Lo Chan-Tzi,	84
Lodykowski, Tadeusz	28
Loganov, D. T.	114
Lokshina, I. Ye.	75
Lomakin, V. A.	122
Lomako, P. F.	103
Longo, Luigi	39
Lopau, H.	106
Lopukhova, N.	5
Lorincz, I.	141
Lorkowski, H. J.	85
Losert, Jiri	49
Loskohilov, V. S.	86
Levinskiy, S. I.	139
Lozinskiy, M. G.	101, 114
Lozinskiy, N. N.	96
Lu Yun,	49
Lubitch, Ruth	56
Luce, Michel	84
Lugossy, Jeno	36
Lukin, D. S.	141
Lukyanov, V. V.	61
Lupu, M. A.	36
Lupu, Petre	29
Lushchik, Ch. B.	129
Lusis, D. Yu.	129
Lutfi, Ali	44
Luther, H.	84
Luty, W.	109
L'vov, B. S.	102, 122
Ly Amadou	41
Lyashenko, B. A.	104
Lyaudis, V. Ya.	63
Lykov, A. V.	134
Lyubetskis, Sh.	14
Lyubimova, M.	5
Lyutenko, A. P.	102



Machavariani, G. A.	93
Macherauch, E.	105
Madejski, J.	109
Maeda, M.	108
Magri, Lucio	38
Makarov, A. P.	94
Makarov, V. S.	17
Makhanek, G. V.	103
Makhkamov, K.	11
Makhmudov, Yu. A.	90
Makhovikov, V. I.	132
Makino Yoshio	122
Maksimenkov, A. N.	74
Maksimov, I. V.	59, 61
	87
Maksimovic, Dragisa	81
Maksyutina, N. P.	81
Malembe, Paul	42
Malinin, Yu. S.	73
Mal'ko, L. N.	59
Malyshev, A. V.	112
Malyshev, V. I.	136
Malysheva, L. F.	66
Mamyrov, N.	12
Man'kin, E. A.	93
Mannicke, Arno	23
Manucharova, Ye.	15, 67
Manukyan, Yu. S.	93
Manusov, E. B.	132
Manuylov, Yu. G.	115
Marchenko, A. S.	57
Marchuk, V. Ye.	91
Marei, A. N.	63
Marek, Franz	38
Marinesco, G.	78
Marinescu, Mihai	30
Marinov, V. S.	66
Markin, A. S.	136
Markov, N. M.	113
Markovic, Cvetko	30
Marlewicz, Mieczyslaw	28
Marshak, M. S.	76
Marten, G.	33
Marti, Jesus	51
Martoch, A.	105
Martynova, O. I.	125
Maruska, Miroslav	23
Mascheck, H. J.	138
Mashanskiy, V. F.	72
Maslennikova, N. G.	121
Maslenok, B. A.	125
Maslova, G. V.	71
Masse, D.	109

Masseron, Jean-Paul	43
Mastryukovaya, T. A.	82
Masyuk, N. P.	73
Matok, M.	97
Matveyev, A. B.	88
Matveyev, G.	2
Matveyev, L. T.	61, 133
Matveyev, S. K.	135
Matzke, H.	138
Maurer, M.	118
Maya, Miguel	54
Mayergoiz, M. D.	112
Mayer-Leibnitz, H.	138
Mayevskiy, I.	11
Mayevskiy, V. M.	142
Mayorov, I. A.	68
Mayorov, L. V.	125, 126
	127
Mazal, Jaroslav	23
Maz'ya, V. G.	112
Medvedkov, N. I.	113
Mekhey, Yu. G.	88
Mekler, L. B.	66
Mekshenkov, M. I.	64
Melnikov, B. N.	57
Mel'nikov, N. N.	82
Mencia, Mario	55
Mendoza, C. G.	141
Menshutkin, V. V.	90
Merlusca, A.	34
Metelev, V. V.	74
Metyushev, B. D.	82
Mewes, K. F.	107
Meyer, J. P.	84
Meyer, K.	108
Meylikhov, Ye. Z.	132
Mezhburd, V. I.	135
Michna, Waldemar	36
Miculescu, Angelo	29
Mierzowski, V. P.	97
Migdalski, J.	98
Mikaoloff, H.	128
Mikhaylov, V. D.	15
Mikhaylov, Yu.	142
Mikhaylovskiy, V. N.	127
Mikic, Petar	31
Mikunis, S.	47
Mikunis, Sh.	48
Mikunis, Shemuel	47
Milcu, M.	80
Milkowski, M.	124
Millner, Tivadar	97
Mil'ner, B. Z.	117

Milojevic, Stojka	30
Milosevic, Sava	36
Mimino, T.	108
Minasaryan, K.	7
Mincher, A.	142
Minkov, P.	77
Minoto, K.	80
Mints, I. I.	17
Mirkin, I. L.	103
Mironshenkova, Z.	20
Mirskiy, M.	142
Mishchenko, V. S.	82
Misztal, Stanislaw	144
Mitin, S. A.	7
Mits, V. N.	116, 121
Mitsevich, A. T.	127
Mityakov, N. A.	59
Mityakova, E. E.	59
Mityuchin, V. M.	65
Mkhitaryan, A. M.	132
Mladenovic, M.	89
Mlcoch, Josef	23
Mogil'ner, A. I.	127
Moiseyev, A. A.	63
Moiseyev, S.	11
Moldoveanu, M.	32
Momcheva, Lilyans	102
Monov, Vasil'	21
Monti, H.	105
Moonen, C. H.	78
Moravcic, Dragoljub	34
Morawski, Wacław	53
Mordasov, V.	13
Morel', I. A.	16
Morin, R.	97
Moroshkin, K. V.	87
Voroz, A. G.	76
Morozov, M. G.	135
Morozov, V. M.	111
Moshchitskiy, S. D.	82
Moskalev, Yu. I.	70
Moskvitin, A. I.	98
Mostovoy, V. I.	126, 127
Motojima, K.	140
Motoo Sato	89
Mototaugu Hamahe	80
Motoyama, T.	119
Mroczek, Andrzej	35
Muchnik, L. N.	127
Mukhin, I. E.	86
Mullaraj, Veli	20
Muller, Rolf	33
Muradyan, A. G.	123
Muratkhodzhayev, V.	15
Muratkhodzhayev, V. M.	16

Muratov, N. P.	9
Mursi, Fu'ad	45
Mustafina, S.	3
Mustel'ier, J. P.	128
Myachin, V. Ye.	121
Myasnikov, V. A.	90
Myasnikova, Ye. N.	69
Mykhaylov, V. V.	131

- N -

Nadezhdin, V. A.	124
Nagirner, D. I.	60
Nagli, L. Ye.	129
Naktinis, I. I.	65
Nalimov, Yu. D.	68
Nam Tum Po	135
Nanev, N.	84
Napolitano, C.	39
Nasledov, D. N.	138
Nasser, Fu'ad	46
Nassiff, Majdi	143
Natapov, B. S.	100
Nazarenko, Vadim	19
Nazarov, A. I.	125
Nazarov, R.	3
Nazarov, V.	10
Negovskiy, V. A.	69
Negreskul, V. V.	138
Neifakh, A. A.	72
Nekrasov, A. M.	98
Nekrasov, L. I.	65
Nemenyi, Istvan	27
Nemeth, Karoly	27
Nenayezdnikov, I. A.	101
Neporozhniy, P. S.	92, 98
Nesmeyanov, A. N.	136
Nesterov, V. G.	125
Netrebenko, K. A.	109
Nevel'skiy, P. B.	62
Neyman, M. S.	91
Nezhentsev, P. I.	115
Nezhinskaya, L.	3
Neznanov, V.	5
Ngjela, Vera	35
Nguyen Duc Chinh	89
Nguyen Duc Quy	52
Nguyen Tan Cu	50
Nguyen Thanh Quat	59
Nguyen Thi Binh	52
Nguyen Thi Thop	52
Nguyen Tho Vien	81
Nguyen Ven Tran	52
Ni, M.	115
Nichita, Vasile	32

Niculescu, J.	29
Niculescu-Misil, Paul	17
Nikitin, G.	107
Nikitinskiy, V.	7
Nikoforov, A.	143
Nikolayev, N. A.	126
Nikolayev, P. V.	59
Nikolayev, S. N.	143
Nikolenko, L. K.	140
Nikolic, D.	90
Nikolov, Iliya	21
Nikula,	
Liikennetarkastaja	
Reija	37
Nomoto, K.	118
Noritsyn, I. A.	114
Nosko, P.	2
Novacek, Vladimir	23
Novak, Vladimir	22
Novikov, V.	10
Novikov, Yu. Z.	18
Novoselov, V. S.	59
Novoselov, Ye. S.	116
Novozhilov, V. V.	16
Novozhilova, M. I.	67
Noy, E.	13
Nozawa, S.	52
Nunez, Carlos	54
Nyeng, Jorgen	38

- O -

Obrosof, A. N.	75
Ochab, Eduard	17
Odivanov, L. N.	131
Oeters, F.	106
Ogryskov, V. M.	7
Ojak, W.	119
Okhotnikov, S. S.	140
Okon, I. M.	120
Okonnikov, E. G.	101
Olcese, G. I.	84
Olenev, V. I.	73
Oleynik, I.	6
Onikienko, A. Y.	71
Onishchenko, G. B.	92
Oparin, A. I.	75
Oparin, N.	4
Oprchalski, Alois	30
Orayevskiy, A. N.	136
Orlov, A.	3
Orlov, I. N.	123
Orlov, M. V.	7
Orlova, L. A.	82

Ortega, Manuel	
Castilla	43
Ostapenya, P.	75
Oste, Sven	51, 52
Ostroskiy, I.	123
Ostrovskiy, I. S.	83
Otto, Kl.	85
Ozerov, L. N.	121

- P -

Paczelt, Ferenc	26
Padoa, Emanuele	78
Padogin, A. A.	14
Pajagic, Petar	30
Pal'guyev, S. F.	83
Paliy, A. I.	18
Palkiewicz, Josef	28
Palladin, A. V.	75
Pal'm, V. A.	83
Pancaldi, Augusto	48
Panchenkov, A. N.	136
Panevkina, Ye. A.	104
Panfilova, Z. Ye.	128
Panian, Z.	57
Panitskov, N. V.	19
Pantke, H. D.	107
Papp-Ritter, Jolan	26
Parin, N. V.	69
Parin, V. V.	94
Parragh,	79
Partigul, S.	3
Pashchenko, Ye. G.	136
Pasynkov, I. G.	127
Patholichiev, N.	2
Patrina, N. A.	114
Patsch, Ferenc	88
Pauly, Hans	138
Pavlov, D.	3
Pavlov, M. A.	10
Pavlov, N. I.	95
Pavlovskiy, Y. I.	124
Pawlowski, J.	89
Pekshev, A. P.	74
Peleyev, A. I.	71
Pelissier, Rene	43
Pen'kov, N. V.	135
Penkov, Sava	33
Peppler, W.	128
Pereherin, B.	116
Perepletchikov, S.	126
Perlin, Yu. Ye.	135
Perotin, J. P.	128
Pershin, G. N.	67

Pervukhin, M.	2
Pessi, Ville	38
Peter, D.	48
Peterkop, R. K.	95
Peters, Hans M.	79
Petersen, J.	107
Peterson, O. P.	76
Petrenko, B. A.	94
Petros'yants, A. M.	125
Petrov, A.	141
Petrov, G. M.	92
Petrov, K. M.	120
Petrov, R.	72
Peyshev, P.	77
Pfaffe, Herbert	143
Pham Manh	52
Pham Quang Le	120
Phan, Quamg	50
Phung Xuan Mai	50
Pi Ts'ai	88
Picard, Caluda	78
Pikovskiy, G.	6
Pilz, K.	58
Pimenov, R. I.	112
Pina, R.	55
Pinchuk, V. I.	77
Pitschel, Y.	24
Plotnikov, V. I.	92
Plyavin, I. K.	130
Plyushchov, N. G.	87
Pobegaylo, K.	2
Podugo'nikov, M.	14
Podval'nyy, A. M.	99
Pod'yachikh, P.	20
Poell, W.	137
Pogorelov, Yu. M.	101
Poinc, Witold	28
Pokatilov, Ye. P.	96
Pokrovskaya, N. V.	83
Pokrovskiy, A.	68
Pokrovskiy, A. A.	76
Pokrovskiy, P. I.	70
Polezhayev, V. I.	114
Polikarpov, G. G.	86
Politov, N. G.	129
Polonskiy, A. S.	70, 102
Polrovskiy, P. I.	70
Poltaraus, B. V.	62
Poltev, V. I.	66
Polyakov, M.	2
Polyanskiy, A.	8
Pomerantsev, A. A.	134
Ponamarev, P.	73
Ponomarev, L. I.	129
Popkov, S. L.	95

Popkov, Yu. S.	95
Popov, D.	6
Popov, D. K.	63
Popov, L. A.	71
Popov, M.	35
Popov, N. I.	86
Popovici, Alina	36
Popovici, C.	137
Popovici, Constantin	32
Porzhitskiy, I. I.	102
Poskonov, A.	1
Postnikov, A.	3
Potap'yevskiy, A. G.	100
Potiyevskiy, N. M.	96
Pozdnyakov, B. S.	126
Preis, H.	119
Prenosil, B.	108
Preobrazhenskiy, V. S.	19
Pricajan, A.	88
Priezzhev, B. A.	99
Prikazchikov, G. P.	111
Prokhorov, A.	94
Prokof'yev, M.	20
Prokoshkin, D. A.	99
Promyslov, V.	18
Pronman, I. M.	92
Propoy, A. I.	92
Proselkov, V. P.	71
Proshin, A. P.	102
Prosin, P.	8
Proslar, H.	116
Protic, Radmilo	30
Protsenko, P. I.	84
Prozorov, L. V.	114
Prudnikova, L. A.	116
Prussak, H.	24
Pshenichniy, A. P.	88
Psurtsev, N.	123
Pugachev, V. S.	62
Puiggros, Rodolfo	55
Pulatova, M. K.	73
Puncochar, Z.	105
Pushkareha, M.	5
Pustovalov, I.	11
Pustrakov, Nikola	21
Puzynina, T. P.	129
Pyaskovskaya-Fesenkova, E. V.	131

- Q -

al-Qadi, Farid Ahmad	48
al-Qadi, Fathi	45

Quach Dinh Hao	53	Rokitskaya, E. Ye.	12
Quijano, Carlos	54	Rokotyan, S. S.	98
Quintero, Eloy J.	53	Roman, Valter	36
- R -		Romanov, A.	73
Racz, Albert	25	Romanov, A. M.	101
Radon, Johann	113	Romanov, P. I.	11
Raf'at, Kamal	46	Romanov, S. N.	65
Raiman, Zdenek	31	Romberg, Mikael	38
Rakhleyeva, Ye. Ye	73	Rosenberg, G. V.	60
Rakhovetskiy, A. N.	123	Rosenthal, Walther	32
Rakov, A. I.	75	Rosetti, M.	80
Ramishvili, G. S.	63	Roshchupkin, D. I.	73
Ramm, A. G.	112	Rosnitskiy, O. V.	63
Ramsayev, P. V.	63	Rovinskiy, A. E.	139
Rashidov, Sh.	17	Rowinski, Robert	139
Rashina, M. G.	68	Rozanov, Yu. A.	121
Rassaerts, H.	85	Rozenberg, G. V.	140
Rastrigin, L. A.	90	Rozenberg, G. Ya.	70
Rasulov, M. L.	109	Rozenberg, Lazar'	
Ratner, I. S.	98	Davydovich	129
Rausch, H.	108	Rozenko, P.	11
Ravar, I.	29	Rozgonyi, Tamas	36
Rayer, A.	12	Rozov, N. Kh.	111
Razumovskaya, A. N.	84	Rozov, R. A.	113
Rebusapca, D.	29	Rudin, E. D.	6
Regoa, Oscar F.	56	Rudnev, Yu. P.	93
Reidel, H. J.	128	Ruiz, Martin	56
Reis, H.	39	Rukhadze, V. A.	10
Rellermeyer, H.	108	Rumer, Yu. B.	64
Rendon, Rodrigo		Rumyantsev, S. N.	76
Restrepo	54	Ruppo, A. S.	94
Repina, N. I.	104	Rusakova, Ye. V.	76
Repkin, V. V.	63	Rusinov, V. S.	72
Repkina, G. V.	63	Rutes, V. S.	107
Resi Kjeil Gjostein	5	Ryaboy, M. I.	15
Reveillard, Y.	105	Ryabushkin, T.	6
Rezin, M. G.	101	Rybakina, O. G.	100
Ribovskaya, O.	114	Ryhakova, Y. A.	103
Ribovski, A.	114	Rybin, V.	3
Richter, M.	138	Rybnikov, A. K.	111
Rieger, H.	108	Rydl, Miroslav	32
Rif'at, Kamal Al-Din	46	Rysin, L. S.	116
Riha, Ladislav	23	Rytvinskiy, A. I.	101
Rivkin, S. S.	123	Ryzhkov, I.	16
Rivkind, V. Ya.	111	Ryzhkov, V. K.	113
Riyspere, H.	58	Ryzhkova, N. I.	63
Roche, Waldek	17	Ryzhov, Yu. A.	136
Rodin, Yu.	93, 117	- S -	
Rodinov, Ya. G.	93	Saad, Pedra	55
Rodnquez, M.	55	Sa'ad Al-Din, Mursi	47
Rogov, A. A.	86	Sabbagh, Nabil	44
Rogovin, Z. A.	102	Sabinin, K. D.	131
Rohde, Diether	25	Sabinin, Yu. A.	59

Sabry, Isma'il	45
Sacchetti, C.	79
Sachanov, Ivan	35
Saenger, Georg	85
Safonov, A. N.	129
Safrin, Yu. A.	61
Safronova, U.	133
Sagomonyan, A. Ya.	135
Said-Galiyev, K.	16
Sakovets, O. I.	9
Salak, A.	104
Salamatov, V. V.	132
Salinger, Stevan	34
al-Salmi, Hafez	45
Salvioni, Giovanna	44
Samarin, A. M.	83
Samokhvalova, G. V.	67
Samoylenko, V. I.	91
Samson, A. M.	136
Sanchez, Juan	54
Sandri, Renato	55
Sannier, Jacques	84
Sapezhinskiy, I. I.	64
Sapogov, N. A.	112
Sapundzhiev, Delcho	21
Sarlija, Svetozar	124
Sasonko, S. V.	124
Savchenko, N. Ye.	72
Savel'yev, A.	3
Savinov, V. M.	82
Savitskiy, F.	8
Savitskiy, Ye. M.	99
Savostin, A. F.	116, 140
Savvin, Sergey Borisovich	121
al-Sayrifi, 'Atiyyah	47
al-Sayyid, Jalal	46
Sbytov, N.	18
Schaffer, K.	34
Schaffhirt, Erich	88
Scharmann, A.	79
Schechter, W.	24
Schenck, H.	105
Scherer, Michel	136
Schiano, P.	124
Schlechtendahl, E. G.	128
Schlemmer, J.	24
Schluter, A.	97
Schmidt, Erik	23
Schrader, B.	138
Schroeder, R.	138
Schubert, H.	97
Schuler, Erich	35
Schumann, R.	118
Schurer, Gerhard	24

Sebesta, Miroslav	30
Sedchin, S. F.	57
Sedov, A. A.	1
Sekhov, B.	7
Selser, Gregorio	54, 56
Selyunin, Vasilii	4
Semenchenko, I. V.	87
Semenov, G. N.	70
Semenova, Ye. T.	141
Senichi Ueda	79
Senitskiy, Yu. E.	133
Sen'kevich, A. A.	92
Sereda, G. K.	63
Serenko, A. F.	71
Sergeev, L.	50
Sergeyev, A. I.	75
Sergiyev, P. G.	68
Sergiyevskiy, M. V.	62
Serov, V. I.	94, 113
Seryi, V. V.	87
Severnev, M. M.	94
Shabunina, V.	5
Shakhmatova, L. A.	6
Shalashov, V. A.	13
Shal'man, Yu. I.	116
Shapiro, E. L.	63
Sharpenak, A. E.	75
Shashin, V. D.	12
Shatenshtein, A. I.	76
Shatil, B.	58
Shayovits, Yehuda	56
Shcherbino, M. N.	142
Shchiliyanov, G.	142
Shchukin, M. N.	117
Sheiman, V. A.	131
Sheinis, L. Z.	9
Shelomov, N. P.	19
Shepelev, D. S.	72
Shevchenko, I.	10
Shevchenko, I. M.	100
Shevlyagin, D.	17
Sheynin, Yu.	4
Sheynkman, M. K.	121
Shi Yong-nian	62
Shibirtsev, G.	10
Shifin, K. S.	61
Shifrin, L. K.	15
Shigehisa Iwai	138
Shihkova, E. V.	71
Shingo Tashiro	80
Shinkarev, L.	15
Shipitsina, N. K.	68
Shipov, B. V.	18
Shirkevich, N.	4
Shishkova, Ye. V.	86

Shkol'nikov, N.	10
Shkut, N. V.	95
Shkyarchuk, F. N.	132
Shneyder, A. D.	96
Shoji Shida	86
Shono, T.	85
Shorin, V. A.	64
Shrago, M. I.	65
Shtenberg, A. I.	76
Shubenko-Shubin, L. A.	98
Shuleykin, V. V.	87
Shul'ga, I. B.	121
Shumakov, V. I.	125
Shupik, P. L.	71
Shur, G. N.	95
Shur, N. F.	114
Shurer, Gerhard	2
Shvarts, K. K.	129
Shvets, A. I.	57
Shvetsov, P.	14
Sidocenko, T. V.	142
Sielinski, Stanislaw	113
Sie-Si-San	102
Sigl, R.	88
Silayev, Yu. V.	64
Silv, L. A.	83
Silva, Eugenio	53
Simachev, D. K.	115
Simon, Erno	97
Simonenko, I. B.	109
Simonnet, R.	37
Sinedubskiy, V.	8
Singhuber, Kurt	24
Sinitzin, I. F.	7
Sinitzin, V. I.	125
Siracky, Andrej	32
Sirata, L.	115
Sirota, V. I.	19
Sitek, Zhigniew	89
Sizov, G. V.	102
Skachkov, S.	12
Skalinskiy, E. I.	72
Skoblov, L. S.	103
Skopintsev, B. A.	68
Skorodelov, D. I.	139
Skovoroda, K.	7
Skubenko, B. F.	111
Skvortsov, V. A.	111
Slisenko, A. O.	112
Sliv, L. A.	136
Slomyanskiy, G. A.	121
Smaga, J.	98
Smagliy, A. M.	96
Smirenkin, G. N.	124
Smirnov, N. P.	61

Smirnov, Ye. I.	76
Smirnova, T. M.	95
Smirnova-Goranova, Val.	21
Smirtyukov, M.	3
Smolina, L. N.	83
Smol'skiy, B. M.	134
Smolyanskiy, Vladimir	24
Smyrnova, M. M.	68
Sneh, Moshe	47
Soares, Afranio Brasil	54
Sobolev, V. V.	126
Sokolina, Ye. D.	117
Sokolov, L. B.	82
Sokolov, V. I.	140
Sokolov, Ye. Ya.	98
Sokolova, E. A.	95
Sokolovskaya, I. I.	68
Sokol'skiy, N. V.	140
Sokolskiy, V. N.	18
Solodkin, Ye. Ye.	132
Solovkov, I.	19
Soltynski, A.	119
Solutseva, R. N.	133
Somlev, A.	77
Sommer, B.	104
Sonderegger, P.	136
Sovalov, S. A.	98
Spagnoli, Luisa	54
Spiegelberg, K.	107
Spirit,	35
Sponer, J.	118
Springer, T.	138
Spuerek, J.	23
Spunde, Ya. A.	139
Sretenovic, Mladen	30
Stanila, George	60
Stanislavskiy, L. Ye.	92
Stanosek, J.	137
Starchenko, B. I.	100
Staroduhov, K. F.	104
Starostina, T. S.	82
Starshinov, A. I.	117
Stemkovskaya, Ye. P.	19
Stepanenko, V. T.	99
Stepankov, A.	5
Stepanov, A. V.	126
Stepanov, S. Ya.	111
Stepanyuk, V. V.	132
Stepun, A.	11
Stern, E. N.	93
Stijacic, Radovan	32
Stoilov, Vasil	35
Stojkov, N.	80
Stoyanov, Dimitur	22

Stoyanov, M. N.	124
Stradell, Lenora	46
Stransky, Frantisek	22
Straube, H.	106
Strimbeanu, I.	29
Strizhevskaya, O. I.	19
Stroehr, K. W.	128
Stroganov, A. I.	101
Struyev, A.	8
Stumpf, W.	79
Suchanek, Bohumil	58
Sudakov, V. M.	111
Sudalikov, N. K.	50
Sudarikov, B. N.	103
Sukhanov, M. P.	69
Sukolenov, A. Ye.	114
Sulakvelidze, G. K.	62
Sun Chung-K'ang	123
Surazhskiy, D. Ya.	126
Surkov, A. L.	116
Surkova, S. S.	82
Sushchenya, L. M.	69
Sustacek, A.	24
Sustretov, I. G.	1
Svechinskiy, V. B.	95
Svechnikov, S. V.	137
Svetlov, Ya. B.	133
Svyatov, B.	113
Sysoyev, L. P.	95
Sytenko, L. V.	90
Szabo, I.	78
Szabó, I.	78
Szalanczy, Gyorgy	88
Szechy, Karoly	119
Szherbo, G.	5
Szigeti, Gyorgy	138
Sziladi, Jozsef	35

- T -

Taher, Mustafa	45
Takacs, Jozsef	26
Talyzin, N. V.	140
Tamasdan, St.	80
Taneko Suzuki	80
T'ang Cheng-jung	124
Tankibayev, Zh.	12
Tarabrin, A. P.	131
Taranov, N. I.	67
Tarasov, I. V.	113
Taramann, H.	107
Tarnovskiy, O.	5
Tarusov, B. N.	72
Tatarenko, A. S.	133
Tayliyev, A.	11

Tayyiba, Mustafa	45
Teilhac, Ernest	45
Tejchma, Jozef	27
Telyatnikov, L. I.	91
Terent'yev, P.	14
Terizayel'yan, T.	20
Terskikh, V. V.	73
Teterin, M. P.	132
Theile, Ulrich	34
Thiele, D.	85
Thurner, J.	144
Tichopadova, E.	104
Tikhomirov, V. B.	104, 125
Tikhonov, A. M.	140
Tikhonov, B.	12
Timakov, V. D.	72
Timar, Matyas	26
Timchenko, N.	4
Timofeyev, N.	2
Timoshpol'skiy, M.	13
Tixier, Gilbert	43
Tkachenko, K. V.	142
Tobias, D. A.	14
Todorov, T.	121
Toktonaliyev, A.	8
Tomal, Zdzislaw	28
Tomhalbaye, Francois	42
Tomov, A.	122
Topalov, V.	58
Torao Shimizu	80
Toropov, I. A.	116
Toshchenko, Zh. T.	19
Toth, K.	78
Tovarnitskiy, V. I.	73
Trager, H.	106
Trakhteneyerts, E. A.	91
Tran Dai Nghia	52
Tran Hai Bang	50
Tran Quoc Tu	52
Tran Thanh Xuan	52
Tran Van	52
Tran Van Hien	50
Traub, E.	137
Trefftz, E.	138
Trenkler, H.	105
Tret'yakov, A.	8
Trias, Vivian	53
Trinh Van Thinh	59
Trinkler, M. F.	130
Troyanovskiy, F. M.	9, 142
Trukhanov, G. Ya.	126
Trunov, I. A.	9
Tsankov, Khito	117
Tsao I.i	49
Tsapko, A.	83



Tserlyuk, M. D.	116
Tsirkunenکو, A. T.	93
Tsirolnikov, S.	56
Tsoiman, G. I.	131
Tsokanov, V. V.	92
Tsyppkin, Z.	92
Tsyrlin, L.	6
Tu Dien	113
Tudor, Constantin	89
Tumanov, V.	19
Tumanyan, V. G.	64
Tumova, E. G.	131
Tunakov, A. P.	131
Tung K'o-ch'in	62
Tychinin, V.	13
Tyminski, Stanislaw	119
Tyutyunov, V. A.	139

- U -

Udovichenko, P.	20
Uglov, F. G.	74
Uhlenhuth, P.	80
Ulanov, B. P.	66
Ulbricht, Walter	17
Urban, Ludek	22
Urbanek, Zdenek	23
Ushakov, V. B.	65, 92
Usiyevich, M.	5
Uspenskiy, V. A.	110
Uspenskiy, Ya. K.	14
Ustinova, V. A.	65
Usturoi, Dumitru	29
Utsume, S.	86

- V -

Vaishurd, S. I.	116
Valentijn, J. H.	104
Valitova, F. G.	20
Van Son	50
Vandenbussche, Gerard	84
Vangengeim, G. Ya.	62
van Lent, P. H.	105
Varga, Bela	88
Vasdov, Guluh	31
Vashkov, V. I.	76
Vasilenko, K. M.	83
Vasil'ev, A. A.	61
Vasilev, K. P.	10
Vasil'ev, V. A.	60
Vasil'ev, Yu. M.	75
Vasil'yev, A. M.	20
Vasil'yev, G. A.	128
Vasil'yev, P.	4

Vasil'yev, V. A.	96
Vasil'yev, Yu. N.	139
Vasil'yeva, V. S.	133
Vasinski, T.	117
Vasyl'yev, V. I.	96
Vavilov, V. S.	137
Vavrinec, Jozef	22
Vaynshteny, V. E.	114
Vdovin, V. L.	59
Veintrauh, M.	28
Veksler, A. Z.	135
Velasco, Fernando	
Castillo	40
Vel'bitskiy, I. V.	112
Vendillo, V. P.	84
Venttsel, T. D.	112
Veret, Claude	137
Vergner, Zdenek	23
Verhaegen, B.	43
Verkhopyatnitskiy, P. D.	92
Verniceanu, A.	28
Vernier, Bernard	45
Vershilova, P. A.	76
Vershinin, Yu. N.	92
Vertushkin, V. K.	114
Veselov, P. V.	19
Vetlov, I.	140
Vicek, Josef	23
Videnov, I. V.	21
Vieira, Gilberto	55
Vieyra, Justin	42
Vil'chinskaya, A. R.	82
Vilenska, Esther	47
Villamayer, M.	137
Vilsan, Ion	32
Vinciguerra, Decio	79
Vinkaln, I. Zh.	134
Vinnichenko, K.	95
Vinograd-Finkel', F. R.	70
Vinogradov, B. C.	57
Vinogradov, B. S.	134
Vinogradov, K. K.	14
Vinogradov, N. A.	72
Vinogradova, I. E.	102
Virstelle, G.	42
Virtsev, V. S.	9
Vishnevetskiy, I.	10
Vishnevskiy, S. S.	19
Vishnevskiy, Yu. L.	96
Vishnyakov, V. A.	90
Visic, Stanislaw	90
Vitol, A. Ya.	130
Vitovskiy, V. F.	96
Vivar, Hugo	53

Vladimirov, Yu. A.	73, 74
Vladov, Gulub	31
Vlasov, B. V.	14, 117
Vlasov, L. V.	10
Vobornik, Bohumil	22
Voinov, A. N.	139
Voinov, S. S.	61
Vol'cinger, N. E.	61
Vol'f, M. B.	139
Vol'kehnshiteyn, A. A.	134
Vol'kenshteyn, M. V.	64, 66
Volkov, A. S.	117
Volkov, T.	3
Volodin, Ye. I.	121
Voloshin, I.	133
Volotovskiy, I. D.	65, 66
Vol'pert, E. G.	143
Volynets, B. F.	95
von Bogdandy, L.	122
Vonrak, Jiri	23
Vorob'yev, Konstantin V.	6
Vorob'yev, V.	1, 12
Vorob'yev, V. I.	72
Voronel, A. V.	129
Voskoboynikov, I. M.	132
Voskresenskiy, N. A.	95
Voyutskiy, V. S.	136
Voznesenskiy, A. A.	98
Voznyakov, A.	15
Vu Tu Lap	89
Vukasinovic, Slohodan	89
Vukovic, Dusan	30
Vuks, M. F.	133
Vulchenov, Stoycho	21

- W -

Walther, K. H.	140
Wang De-tsam	62
Wang Shu-yao	49
Wardi, Ali	48
Wasmuht, J. T.	107
Wassilopoulos, M.	85
Wasylkowski, Janusz	28
Watanabe, S.	108
Weinreich, W.	107
Weiss, H. H.	97
Weiz, Herbert	24
Wen Hung-chun	50
Wende, A.	85
Wenzel, W.	107
Werderer, B.	128
Werynski, Andrzej	98
Wianecki, J.	139

Wick, K.	106
Wicks, E.	85
Widhofner, H.	33, 34
Wieckowski, Kazimierz	141
Wierzhicki, Jeremi	28
Wiesner, F.	104
Wilenske, Esther	47
Wilhelm, Roggendorf	122
Willmann, Ch. I.	60
Wilmet, J.	43
Winkler, Horst	79
Wirsig, Herman	25
Won Song-hui	50
Wyshofsky, Gunther	24

- X -

Xhunani, Pleurat	20
Xuan Hai	52

- Y -

Yakobi, N.	95
Yakobson, L. M.	64
Yakovchik, G. S.	115
Yakovlev, N.	95
Yakushin, B. V.	141
Yampol'skiy, V. G.	123
Yanin, L. V.	71
Yasil'yeva, A. B.	111
Yatsenko, P.	13
Yefim'yev, A.	141
Yefremov, V. V.	75
Yegerev, V. K.	65
Yegorov, B.	141
Yegorov, K. I.	76
Yegoshkin, E. Yu.	103
Yeh Chia-tung	62
Yeliseyev, V. K.	120
Yenenko, S. O.	65
Yepishev, A.	18
Yeremenko, I. V.	93
Yeremev, I. P.	127
Yermakov, G. V.	96
Yermanok, M. Z.	103
Yermolayev, V. L.	73
Yerofeyev, B. N.	10
Yeroshin, V. A.	111
Yershov, B. G.	130
Yershov, V.	11
Yevsevev, G. A.	132
Yi Chong-hwan	49
Yi Il	51
Yim Hong-hyok	50
Yogoshkin, E. Yu.	103

Yordanov, Ivan	21
Yoshihiro Konishi	122
Yu Si-ho	51
Yu Tal-Soo	50
Yuan-Sun, H.	104
Yudin, G. G.	75
Yun Ch'i-ho	49
Yun Nae-gil	49
Yurchenko, V. Ye.	91
Yurgenson, A. P.	61
Yusem, B.	20

- Z -

Zabelok, B.	18
Zadumkin, S. N.	131
Zagrafov, V. G.	125
Zahran, Sa'ad	46
Zakharov, M.	18
Zakrevskiy, A. D.	112
Zaleskiy, V. I.	101, 114
Zalgaller, V. A.	112
Zalivadnyy, V.	63
Zalmanzon, E. S.	75
Zalski, Tadeusz	28
Zanker, Valentin	85
Zapryanov, Z. D.	139
Zaretskaya, Yu.	72
Zarichnyak, Yu. P.	131, 132
Zarubin, G. P.	67
Zarzycki, Juliusz	27
Zaslavskiy, Yu. S.	102
Zatsepina, G. N.	65
Zavadskiy, K. M.	75
Zavil'gelskiy, G. B.	73
Zawada, E.	27
Zawistowska, Zofia	27
Zaychenko, G.	2
Zaytsev, M. I.	121
Zdanovich, V. G.	87
Zdravkovic, Aleksandar	31
Zelenskiy, V.	10
Zelikson, M. Z.	14
Zeller, C.	105
Zemer, Hannah	47
Zemskaya, K. A.	72
Zemtsov, G. P.	91
Zenichiro Kuri	86
Zhakishev, A. S.	1
Zharikov, G. P.	63, 136
Zharova, E. I.	68
Zhdanov, D. A.	64
Zhdanov, V. H.	76
Zhezherun, I. F.	127
Zhil'tsova, V. M.	66

Zhitnikova, L. M.	63
Zhizhnyakov, V. I.	134
Zhiznevskaya, G. Ya.	67
Zhu Zhong-ji	62
Zhuk, V. V.	110
Zhukauskas, Al'girdas	141
Zhukov, V. V.	103
Zhukov, Ye.	17
Zhukovskiy, M. I.	131
Zhukovskiy, Ya.	14
Zhvaley, V. F.	87
Zilanov, V. K.	70, 102
Zilber, Ya'acov	47
Zilitinkevich, S. I.	94
Zimin, A. B.	111
Zimnoch, Stanislaw	113
Zimon, A. D.	99
Zinchenko, P. I.	62
Zinchenko, V. P.	62
Zinenko, V. A.	120
Ziyadullayev, S.	12
Zlochevskiy, Ye. M.	91
Zokharevskiy, M. S.	83
Zolnay, Stefan	22
Zolotilov, B.	16
Zoltan,	26
Zommer, V. P.	125
Zoroastrova, V. M.	20
Zota, Benone	29
Zotev, Angel	31
Zotikov, G. I.	116
Zschweigert, M.	118
Zubkov, V. M.	117
zum Winkel, K.	85
Zuyev, A.	14
Zybina, D. L.	66
Zycka, J.	124
Zykov, A. I.	136

\*\*\*

UNCLASSIFIED  
Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen  
Deputy Director for Operations  
Defense Technical Information Center  
7725 John J. Kingman Road  
Suite 0944  
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar  
Chief, CIA Declassification Center,  
Declassification Review and Referral  
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

UNCLASSIFIED



## Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0831939	78-03109A	59	1	2	123	Consolidated Translation Survey Through 31 March 1968	3/31/1968	252	Approved For Release	3/25/2004
AD0833917	78-03109A	59	1	3	124	Consolidated Translation Survey Through 30 April 1968	4/30/1968	223	Approved For Release	3/25/2004
AD0835906	78-03109A	59	1	4	125	Consolidated Translation Survey Through 31 May 1968	5/31/1968	267	Approved For Release	3/25/2004
AD0838252	78-03109A	59	1	5	126	Consolidated Translation Survey Through 30 June 1968	6/30/1968	341	Approved For Release	3/25/2004
AD0839299	78-03109A	59	1	6	127	Consolidated Translation Survey Through 31 July 1968	7/31/1968	354	Approved For Release	3/25/2004
AD0841414	78-03109A	59	1	7	128	Consolidated Translation Survey Through 31 August 1968	8/31/1968	255	Approved For Release	3/25/2004
AD0844244	78-03109A	59	1	8	129	Consolidated Translation Survey Through 30 September 1968	9/30/1968	259	Approved For Release	3/25/2004
AD0845247	78-03109A	60	1	1	130	Consolidated Translation Survey Through 31 October 1968	10/31/1968	252	Approved For Release	3/25/2004
AD0847806	78-03109A	60	1	2	131	Consolidated Translation Survey Through 30 November 1968	11/30/1968	284	Approved For Release	3/25/2004
AD0848152	78-03109A	60	1	3	132	Consolidated Translation Survey Through 31 December 1968	12/31/1968	176	Approved For Release	3/25/2004
AD0848841	78-03109A	60	1	4	133	Consolidated Translation Survey Through 31 January 1969	1/31/1969	188	Approved For Release	3/25/2004
AD0850186	78-03109A	60	1	5	134	Consolidated Translation Survey Through 28 February 1969	2/28/1969	167	Approved For Release	3/25/2004
AD0851748	78-03109A	60	1	6	135	Consolidated Translation Survey Through 31 March 1969	3/1/1969	232	Approved For Release	4/5/2004
AD0853348	78-03109A	60	1	7	136	Consolidated Translation Survey Through 30 April 1969	4/30/1969	262	Approved For Release	3/25/2004
AD0856606	78-03109A	60	1	8	137	Consolidated Translation Survey Through 31 May 1969	5/31/1969	306	Approved For Release	3/25/2004
AD0857706	78-03109A	63	1	1	138	Consolidated Translation Survey Through 30 June 1969	8/22/1969	413	Approved For Release	3/25/2004
AD0858054	78-03109A	63	1	2	139	Consolidated Translation Survey Through 31 July 1969	9/3/1969	185	Approved For Release	3/25/2004
AD0860022	78-03109A	63	1	3	140	Consolidated Translation Survey Through 31 August 1969	10/3/1969	315	Approved For Release	3/25/2004
AD0860905	78-03109A	63	1	4	141	Consolidated Translation Survey Through 30 September 1969	9/30/1969	285	Approved For Release	3/25/2004
AD0861886	78-03109A	63	1	5	142	Consolidated Translation Survey Through 31 October 1969	10/31/1969	269	Approved For Release	3/25/2004
AD0863371	78-03109A	63	1	6	143	Consolidated Translation Survey Through 30 November 1969	11/30/1969	224	Approved For Release	3/25/2004
AD0864516	78-03109A	63	1	7	144	Consolidated Translation Survey Through 31 December 1969	12/31/1969	177	Approved For Release	3/25/2004